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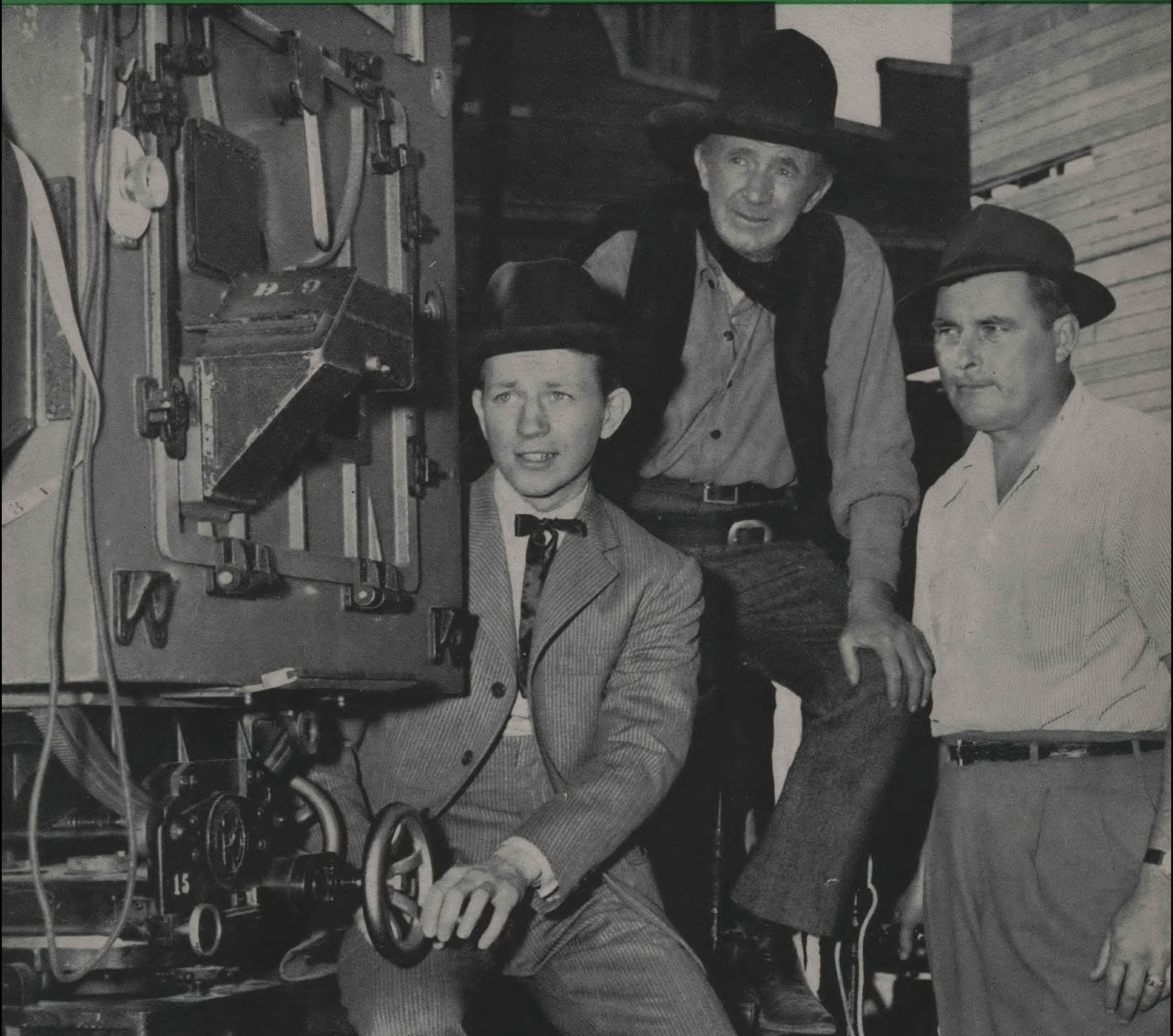

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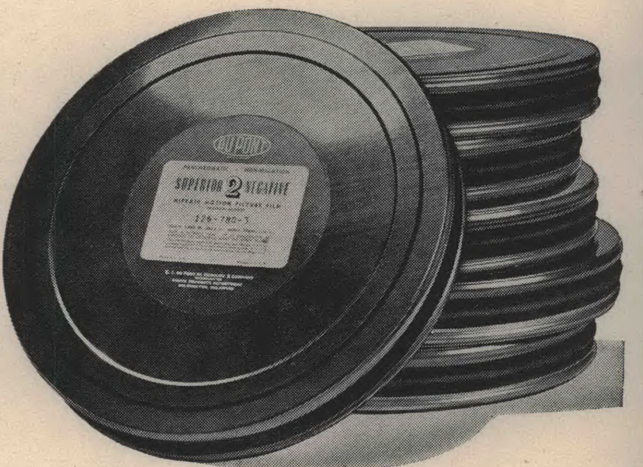

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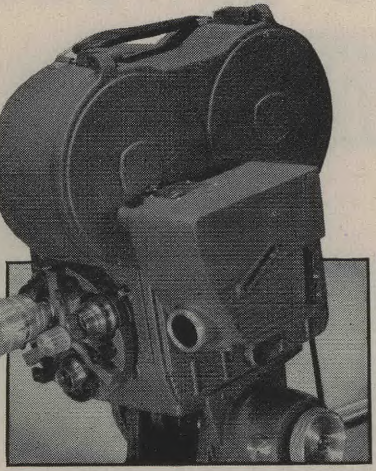

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Current Assignments of A.S.C. Members

Major film productions on which members of the American Society of Cinematographers were engaged as directors of photography during the past month.

Columbia

- CHARLES LAWTON, "Miss Grant Takes Richmond," with Lucille Ball, William Holden, Janis Carter and James Gleason. Lloyd Bacon, director.
- BURNETT GUFFEY, "The Blank Wall," (Walter Wanger Prodn.) with James Mason, Joan Bennett and Geraldine Brooks. Max Opuls, director.
- CHARLES LAWTON, "Lawless," with Randolph Scott, Dorothy Malone, Jeff Corey, Forest Tucker and Frank Faylen. Gordon Douglas, director.
- RAY CORY, "Lawless, "2nd unit.
- IRA MORGAN," The Adventures Of Sir Galahad," (Esskay) with George Reeves, Nelson Leigh, Pat Barton and Hugh Prosser. Spencer Bennet and Derwin Abrahams, directors.
- LESTER WHITE, "The Adventures of Sir Galahad," 2nd Unit.
- VINCENT FARRAR, "Blondie's Hero," with Penny Singlton, Arthur Lake, Larry Simms, Marjorie Kent and Jerome Cowan. Edward Bernds, director.
- JOSEPH WALKER, "My Next Husband," with Rosalind Russell, Robert Cummings, Gig Young, Marie McDonald and Harry Davenport. Norman Foster, director.

Independent

- JOE BIROC, "Mrs. Mike," (Sam Bischoff Prodn.) with Dick Powell and Evelyn Keyes. Louis King, director.

M-G-M

- CHARLES ROSHER, "The Red Danube," with Walter Pidgeon, Peter Lawford, Janet Leigh, Ethel Barrymore and Angela Lansbury. George Sidney director.
- ROBERT SURTEES, "Intruder In The Dust," with Claude Jarman, Jr., David Brian, Juan Hernandez, and Charles Kemper. Clarence Brown, director.
- HAROLD ROSSON, "On The Town," (Technicolor) with Frank Sinatra, Gene Kelly, Vera Ellen, Ann Miller and Betty Garret. Gene Kelly, director.
- PAUL VOGEL, "Battleground," with Van Johnson, John Hodiak, Ricardo Montalban, George Murphy, Marshall Thompson, Tommy Breen, Jim Mitchell, Bruce Cowling and Denise D'Arcele. William Wellman, director.
- HARRY STRADLING, "Annie Get Your Gun," (Technicolor) with Judy Garland, Howard Keel, Keenan Wynn, Frank Morgan, Edward J. Arnold, J. Carroll Naish and Clinton Sunberg. Busby Berkeley, director.
- RAY JUNE, "Death In The Doll House," with Ann Sothern, Zachary Scott, Gigi Perreau, Nancy Davis, Kristine Miller and Tom Hellman. Pat Jackson, director.
- JOE RUTTENBERG, "Side Street," (shooting in New York) with James Craig, Farley Grainger, Paul Kelly and Cathy O'Donnell. Anthony Mann, director.

Monogram

- WILLIAM SICKNER, "Safety Pins," with Leo Gorcy and Annabelle Shaw. Reginald LeBorg, director.
- HARRY NEUMANN, "The Kid Came West," with Johnny Mack Brown, Max Terhune and Reno Browne. Ray Taylor, director.

(Continued on Page 183)

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FOUNDED January 8, 1919, The American Society of Cinematographers is composed of the leading directors of photography in the Hollywood motion picture studios. Its membership also includes non-resident cinematographers and cinematographers in foreign lands. Membership is by invitation only.

The Society meets regularly once a month at its clubhouse at 1782 North Orange Drive, in the heart of Hollywood. On November 1, 1920, the Society established its monthly publication "American Cinematographer" which it continues to sponsor and which is now circulated in 61 countries throughout the world.

Dominant aims of the Society are to bring into close confederation and cooperation all leaders in the cinematographic art and science and to strive for pre-eminence in artistic perfection and scientific knowledge of the art.

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COVER PHOTO

RUSSELL METTY, A.S.C., (striped Shirt) gives Donald O'Connor and Walter Brennan some pointers in lining up a shot with the Technicolor camera. "Gosh, even the viewfinder image is in Technicolor!" exclaimed O'Connor who has just completed one of the best roles of his career in Universal-International's "Curtain Call At Cactus Creek," in which Brennan also appears.—Photo by Sherman Clark.

AMERICAN CINEMATOGRAPHER, established 1920, is published monthly by the A. S. C. Agency, Inc., 1782 N. Orange Dr., Hollywood 28, Calif. Entered as second class matter Nov. 18, 1937, at the postoffice at Los Angeles, Calif., under act of March 3, 1879. SUBSCRIPTIONS: United States and Pan-American Union, $3.00 per year; Canada, $3.00 per year; Foreign, $4.00. Single copies, 25 cents; back numbers, 30 cents; foreign single copies, 35 cents; back numbers, 40 cents. Advertising rates on application. Copyright 1949 by A. S. C. Agency, Inc. AUSTRALIAN REPRESENTATIVE: McGill's, 179 Elizabeth St., Melbourne.

Hollywood Bulletin Board

Charles Clarke Re-elected A.S.C. President

Jackman, Edeson, Skall, Rennahan and Boyle also returned to office for 1949-50. Folsey new vice-president.

Charles G. Clarke, A.S.C.

THE AMERICAN Society of Cinematographers, last month, re-elected Charles G. Clarke to a second term as its president. Also re-elected for the 1949-50 term were Fred W. Jackman, executive vice-president and treasurer; Arthur Edeson, 1st vice-president; William V. Skall, 3rd vice-president; Ray Rennahan, secretary; and John Boyle, sergeant-at-arms. George Folsey, previously on the Board of Governors, was elected 2nd vice-president. Victor Milner was elected a member of the Board of Governors.

Complete Board of Governors for the coming year—in addition to the officers named above—will include Sol Polito, Alfred Gilks, Charles Rosher, Lee Garmes, John Seitz, Leon Shamroy, Joseph Walker, and Victor Milner. Alternate Board members, elected to serve for a period of one year, and who will function when various regular Board members are absent, are John Arnold, Sol Halprin, Arthur Miller, Hal Mohr and Joseph Ruttenberg.

The re-election of virtually the entire A.S.C. Board of Governors and its officers was the result of the Board's excellent work during the past year, which saw monthly meetings greatly improved, both in quality of entertainment and technical value, and the completion of the A.S.C.'s projection facilities which now will add the luxury of motion pictures, both 16mm. and 35mm., to the list of privileges afforded members. Special credit is due president Clarke and executive vice-president Fred Jackman for the success of the latter project, for it was they who, once mandated by the membership, gave unstintingly of their time, worked diligently on plans for the new projection booth and the necessary auditorium alterations, and supervised the project to early completion.

President Clarke is recognized as one of the ablest of Hollywood's directors of photography. Under contract to Twentieth Century-Fox studios for many years, he will be remembered for his excellent Technicolor photography on such pictures as "Captain From Castile," "Green Grass of Wyoming," and the current Fox hit, "Sand." He is currently scheduling the photography on another Fox epic and only recently returned from Borneo where he filmed background material for the picture.

Clarke became a member of the A.S.C. in 1925 and shortly thereafter was elected a member of the Board of Governors. With the exception of a few years, he has been on the Board continuously and has served as an officer most of the time. He has been a tireless worker in the interests of the Society and much of the A.S.C.'s progress in recent years is due to his conscientious and ceaseless efforts.

Clarke firmly believes that continued progress of the American Society of Cinematographers depends upon the wholehearted support and cooperation of the entire membership, with the counsel and guidance of the Board of Governors.

In accepting his re-election, President Clarke stated: "I am greatly honored that the A.S.C. has selected me as its president for a second term and I am happy in the thought that I shall be able to continue working with the same men who have worked so harmoniously together during the past year in furthering the progress of the Society. I feel sure that greater progress and more accomplishments lie ahead for us, and I look confidentally toward this goal in accepting the high office again entrusted to me."

In unanimously re-electing Fred Jackman executive vice-president and treasurer for the sixth consecutive year, the Board of Governors expressed in deed its sincere appreciation for his enthusiastic and capable direction of the Society's affairs which has been greatly responsible for the progress of the organization. Although Fred Jackman's background is substantially that of his colleagues, his experience as an executive began years ago and his talents for directing business affairs gained him recognition when at Warner Brothers studio he set up that company's special effects department, planning and later building much of its equipment.

•

LLOYD KNECHTEL, A.S.C., who did special effects photography on the as yet un-released "Alice in Wonderland," filmed in Ansco Color in Europe, has joined forces with Al Schmidt to operate a special effects and optical printing enterprise for independent producers. Headquarters will be at Samuel Goldwyn studio.

•

FRANK PLANER, A.S.C., having completed photography on Universal-International's "Come Be My Love," is preparing to embark for an extended holiday in Europe.

•

THE S.M.P.E.'s 66TH semi-annual convention will be held at the Hollywood Roosevelt Hotel in Hollywood, October 10 to 14 of this year.

•

CONSOLIDATED FILM Laboratories, after making satisfactory tests with DuPont's new color print stock, is re-tooling to handle processing of the new DuPont stock in both its Hollywood and Fort Lee plants.

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PAUL MANTZ is piloting camera plane for the air sequences being shot in Florida for Darryl Zanuck's "Twelve O'Clock High."

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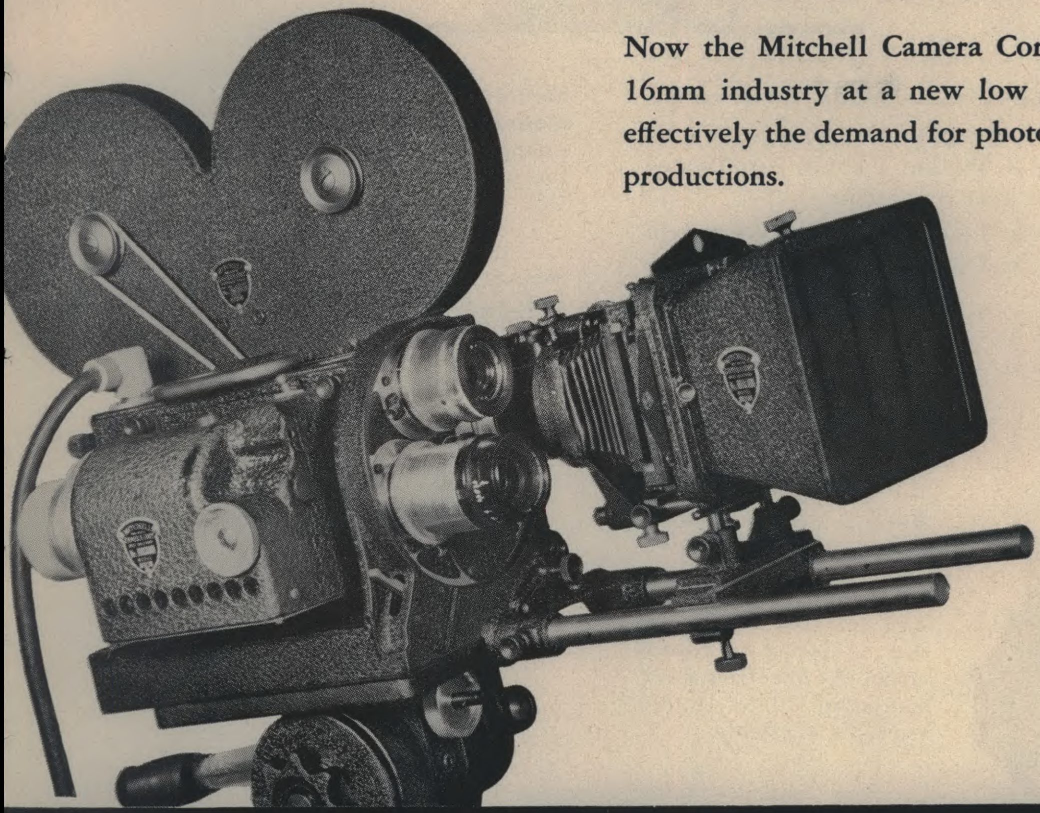

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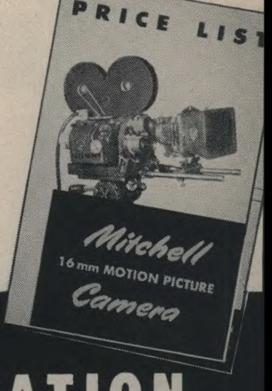

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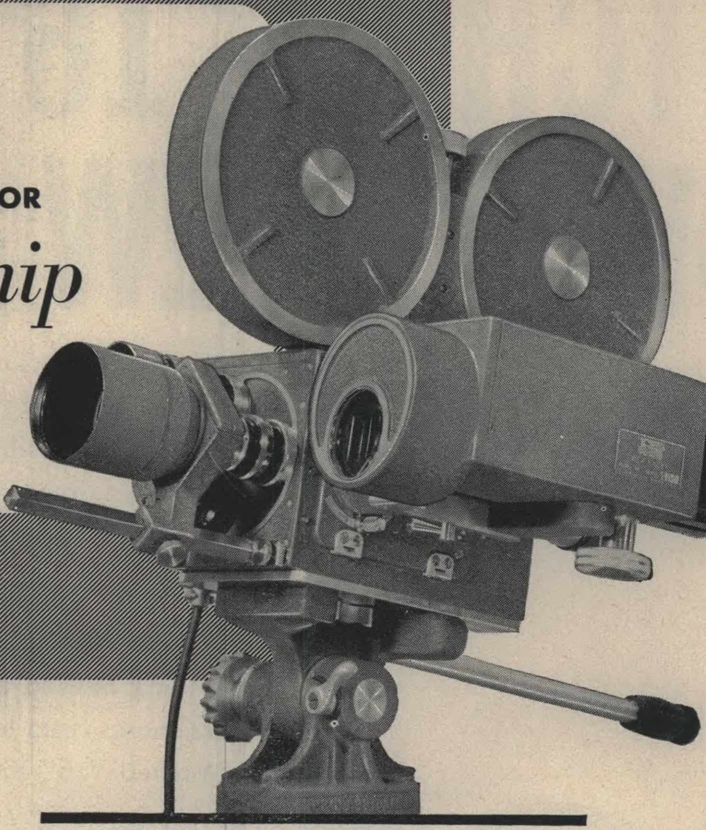

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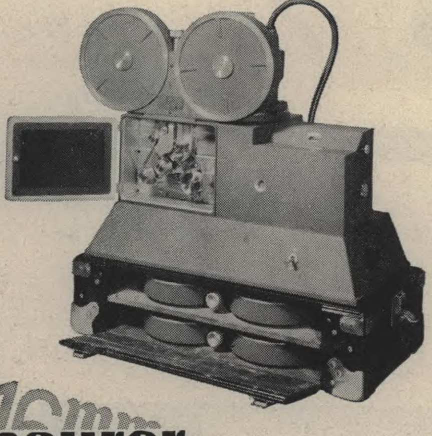

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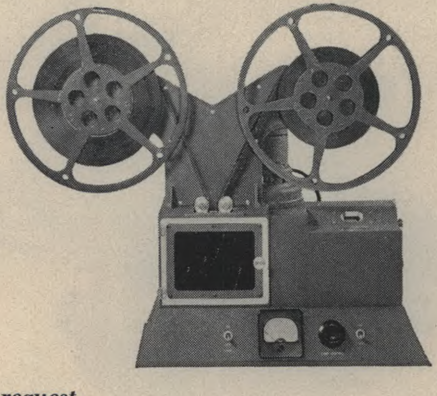

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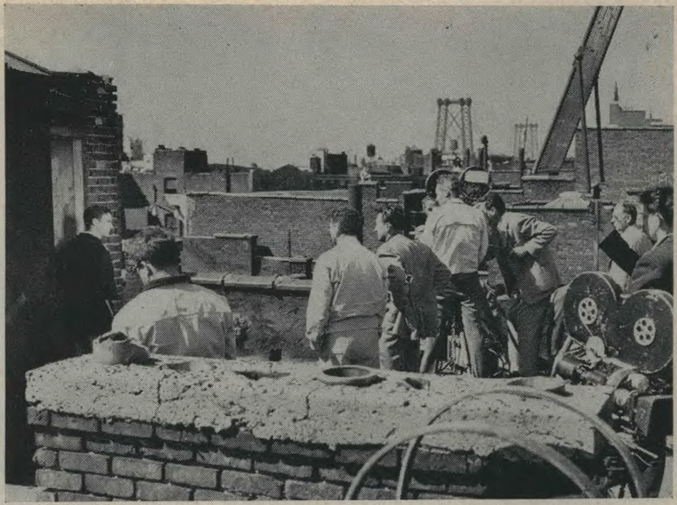
Documentary Style

Maury Gertsman, A.S.C., finds that shooting pictures in actual locales affords the cinematographer refreshing new fields for camera artistry.

By HERB A. LIGHTMAN



TYPICAL of the actual locales in which Maury Gertsman photographed scenes for "City Across the River" is this Brooklyn, N. Y., rooftop. Sunlight reflectors replaced the booster lights that ordinarily would be used on a similar studio lot exterior.

M. Gertsman, A.S.C.

THE AWARD of an Academy "Oscar" to William Daniels, A.S.C., for his black and white photography of Mark Hellinger's "The Naked City" is a most welcome nod of approval for the documentary style of photography that has characterized some of Hollywood's outstanding photoplays during the past two years. Besides being perfectly tailored to the newsdrama type of screen story, this realistic photographic style proves that Hollywood's cinematographers are not dependent upon the sound stages and studio back lots, but are capable of producing high quality photography in actual far-flung locales while using the barest necessities of equipment.

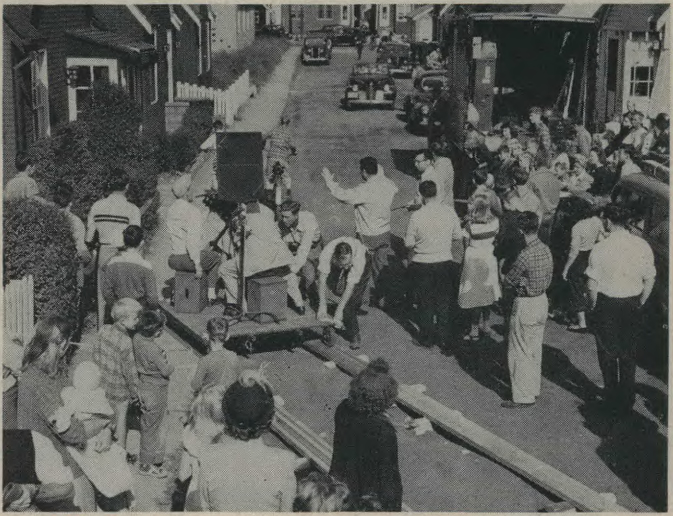
The latest film to use this scene-of-the-crime lens technique is "City Across the River," Universal-International's absorbing story of juvenile delinquency. Photographed with realistic force by Maury Gertsman, A.S.C., it is a tautly paced drama of juvenile violence and crime set against a background of tenements and teeming streets.

In order that the backgrounds might be absolutely authentic, the cast and crew junketed to New York and spent eight days in Brooklyn shooting all of the exteriors and process shots and some of the interiors as well. The company traveled light. A skeleton crew of technicians from Hollywood formed a nucleus for the operating staff. Only the barest necessities of equipment were transported across country, the lighting units being rented in the locale itself.

The action of the story takes place in a good-sized segment of Brooklyn. The locations included tenements on South Third Street, crowded blocks on busy Havemeyer Street, the Marine Parkway Bridge, Prospect Park and Boys High School. For director of photography Gertsman the assignment proved a challenge in several ways.

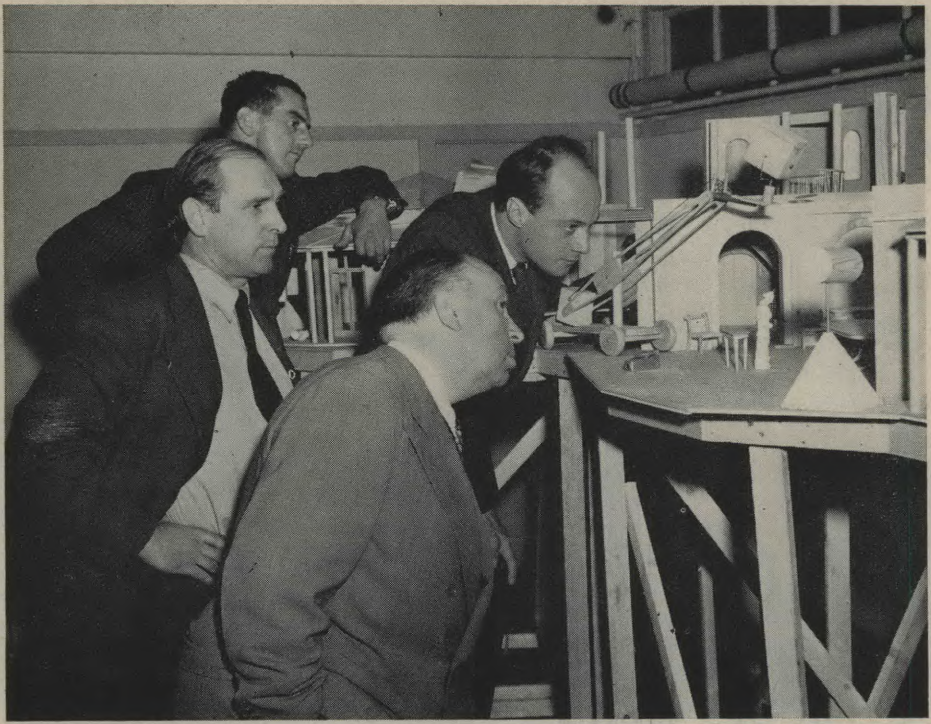
The foremost problem was not a technical one, but rather a dilemma resulting from natural human curiosity. Wherever the U-I camera crew set up, the area immediately began to teem with curious onlookers. "I don't know where they all came from," Gertsman recollects. "They came piling out of houses and tenements, ganging up in front of the camera despite the efforts of police to hold them back. Some of them weren't very polite either. One gang of kids kept throwing

(Continued on Page 174)



GERTSMAN'S big problem was not a technical one, but rather a dilemma resulting from natural curiosity. Wherever he set up his camera, the sight attracted onlookers. One gang of kids kept throwing prune pits in the dolly tracks.

THERE ARE many night scenes in the picture and these were shot using conventional floods. Special lights were set up in store windows to further enhance the realism of sidewalk scenes after dark—a realism that Gertsman achieved with remarkable accuracy.



ALFRED HITCHCOCK (foreground) believes in thorough planning of a picture before putting it before the cameras. He is shown here with Jack Cardiff, A.S.C., and two associates planning camera angles for a sequence in "Under Capicorn," produced in England. Scale models of principal interior sets afforded pre-shooting visualization of action and camera placement.

Production Methods Compared

The motion picture is not an arena for a display of techniques, says Alfred Hitchcock, adding that techniques often must be sacrificed or compromised when they interfere with the story itself.

Condensation of a paper presented at a recent meeting of British cine technicians by

AFRED HITCHCOCK

THE FILMING of each picture is a problem in itself. The solution to such a problem is an individual thing, not the application of a mass solution to all problems.

Something I do today makes me feel that the methods I used yesterday are out of date, and yet tomorrow I may be faced with a problem which I can best solve by using yesterday's methods. That is why I try to make my first rule of direction—flexibility.

Next, I try to make it a rule that nothing should be permitted to interfere with the story. The making of a picture is nothing but the telling of a story, and the story—it goes without saying—must be a good one. I don't try to put onto the screen what is called "a slice of life" because people can get all the slices of life they want out on the pavement in front of the cinemas and they don't have to pay for them.

On the other hand, total fantasy is no good either—I'm speaking only for myself remember—because people want to connect themselves with what they see on the screen.

Those are all the restrictions I would place on the story. It must be believable, and yet not ordinary. It must be dramatic, and yet lifelike. Drama, someone once said, is life with the dull spots removed.

Now, having got our story—what next? Obviously we must develop our characters and develop the plot. All right, let's say that's been done. It may be putting a year's work in a few words, but let's say it. Are we ready to go on the floor? No, because our picture is going to need editing and cutting, and the time for this work is right now. The cuts should be made in the script itself, before a camera turns, and not in the film after the cameras have stopped turning.

More important, if we shoot each scene as a separate entity out of sequence, the director is forced to concentrate on each scene as a scene. There is then a danger that one such scene may be given too great a prominence in direction and acting, and its relation with the remaining scenes is out of balance, or, again, that it hasn't been given sufficient value and when the scene becomes a part of the whole, the film is lacking in something.

You are all familiar with the "extra shots" that have to be made after the regular schedule is completed. That is because, in the shooting of the scenes, story points were missed. The extra, expository shots are generally identified by an audience for what they are—artificial devices to cover what had been overlooked in the preparation of the film.

Now, how can this be avoided? I think it can best be avoided if a shooting script is edited before shooting starts. In this way, nothing extra is shot, and, most important, story points will be made naturally, within the action itself.

Let me give an example of what I mean. Let's suppose that our story calls for two scenes in a certain street, one a view of a parade going by, and the other—several days later in our plot—being an intimate conversation between two people walking along the pavement. We shoot the scenes on different days, the parade a long shot, and the conversation a close-up. Now, after we've finished our scenes, we discover that the locale of the conversation is not quite clear to the audience. We must now shoot another long shot of that street which we will tack onto the front of the conversation merely to identify the street.

That "identifying long shot," in this case, is an unnecessary one. Because it's not really needed, it's awkward. If we'd seen to it that the script had been given expert editing before the film went on the floor, we would have found some way to identify the street within the structure of the conversation itself. Or, better still, since the parade scene is a long shot, we could have tried, at least, to combine the two. In this way, the parade would serve a dual purpose, its plot purpose, and its expository one.

Another example: if we do not edit before we shoot, we may be faced, in the cutting room, with one of the nastiest of all editorial problems—the unexplained lapse of time. Our characters speak on Monday, and then speak again on the following Monday. That a week has gone by may be essential to our plot, but we may have failed to make it clear in the sequences we have shot. There was a time—long since past—when we would simply have photographed the words "One Week Later" in transparency and caused them to appear on the screen in mid-air during the second scene.

The lapse of time can easily be indicated by the simple method of shooting one scene as a day scene and the next as a night scene, or one scene with leaves on the trees and the next one with snow on the ground. These are obvious examples, but they serve to illustrate what I mean by editing before production commences.

I try never to go to the floor until I have a complete shooting script, and I have no doubt everyone else tries to do the same thing. But, for one reason or another, we often have to start with what is really an incomplete script.

The most glaring omission in the conventional script, I believe, is Camera Movement. "Jane embraces Henry," the script may read. But where is the camera while the two have their fun? This omission is of very great importance. Of course, the director may decide how he is going to film the embrace "when the time comes," as the story conference idiom has it. But I think the time is before shooting. And here we come face to face once again with the fact that the tendency today is to shoot scenes and sequences and not to shoot pictures. The embrace can be shot from the front, from either side, or from above. If we are really going to be arty about the thing, it can be filmed from behind. But when we make that concession we are speaking only of the embrace by itself, and not as part of a sequence which is, itself, part of a picture which ought to be a dramatic whole. The angle from which that embrace is to be shot ought to flow logically from the preceding shot, and it ought to be so designed that it will fit smoothly into whatever follows it, and so on. Actually, if all the shooting is planned and incorporated into the script, we will never think about shooting the embrace, but merely about shooting a picture of which the embrace is a part.

I've taken a long time to get around to telling you that I favor shooting pictures in sequence. After all, the film is seen in sequence by an audience and, of course, the nearer a director gets to an audience's point of view, the more easily he will be able to satisfy an audience.

A picture maker need not try to please everyone, of course. It is important to me,

(Continued on Page 182)

Calibration Of Photographic Lens Markings

National Bureau Of Standards announces convenient graphic method for converting lens speed markings to corresponding "effective f/ markings."

IN THE COURSE of an experimental study of errors in the speed markings of photographic lenses, Dr. F. E. Washer of the National Bureau of Standards has devised a convenient graphic method[1] for converting each of these markings for a given lens to the corresponding "effective f/ number"—an f/ number corrected for light losses within the lens. In this way it is possible to calibrate a lens so that losses of light from absorption, reflection, and scattering within the lens are taken into account, and a more accurate control of the amount of light admitted to the exposed film is obtained.

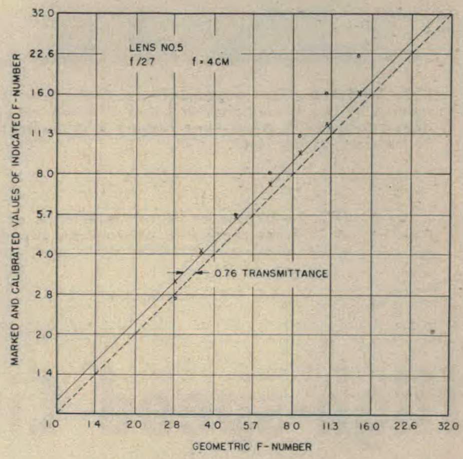


FIG. 2—Logarithmic paper is used so that intervals between successive stop openings may be equal. Circles indicate marked f/ number; crosses indicate calibrated f/ numbers or "transmission" numbers.

In recent years, photographic technology has largely developed from an empirical art to an exact science, making it possible for both the professional and the skilled amateur to control their results in a more scientific manner. With this progress, a demand has arisen for greater precision in the speed marking of lenses. The method now in general use is based entirely on the ratio of the equivalent focal length of the lens to the diameter of the aperture. This ratio—known as the f/ number—gives no consideration to the great differences in the useful light transmitted by various lenses.

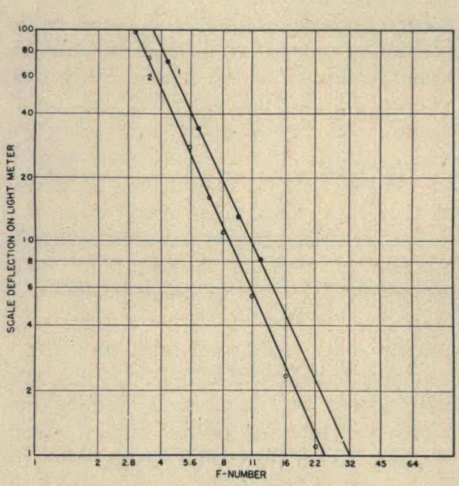


FIG. 1—Graphic method devised by N.B.S. for conversion of lens speed markings to "effective f/ numbers" is illustrated for a typical lens. In curve 1, scale deflections of a light meter are plotted against corresponding f/ numbers of a series of standard diaphragms. Curve 2 is plot of meter readings against marked f/ numbers of lens.

To correct the situation, several new methods of marking lens diaphragms have been proposed which give weight to the variations in the loss of light for different lenses. Not long ago, Dr. I. C. Gardner of the National Bureau of Standards developed a method[2,3] of testing the marked diaphragm openings so that values which entirely compensate for differences in transmission can be obtained and applied to the scale of f/ numbers on a photographic lens. In this system the markings, known as effective f/ numbers or t/ numbers, are obtained by means of a photoelectric cell and a relatively simple photometric procedure, in which the diaphragm of the lens to be calibrated is adjusted to transmit the same amount of light as as similarly placed opening of standard size. The standard opening corresponds to an ideal lens on a given aperture ratio, in which incident light is wholly transmitted. A complete calibration is obtained by the use of a series of openings of graduated size corresponding to various aperture ration values.

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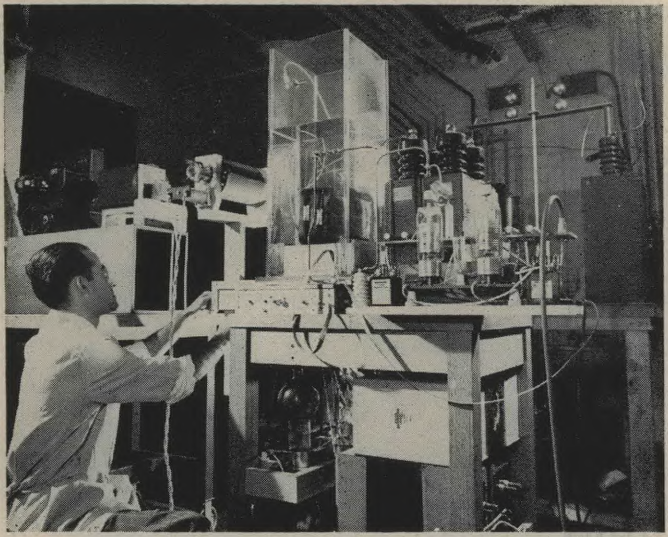

FIG. 1—Setting up preparatory to the taking of high-speed X-ray movies in the Westinghouse Lamp Division research laboratory. The high-speed oscillograph-type camera may be seen immediately above technician, at far left.

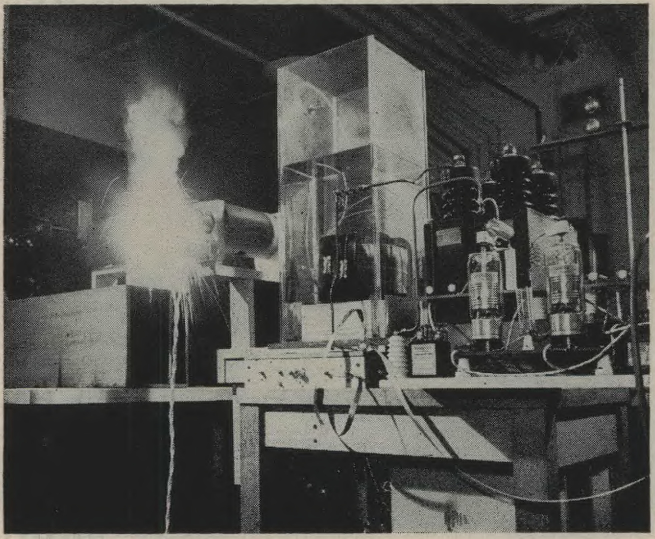

FIG. 2—Exposures of ten-millionths of a second were made at rate of 100 per second to photograph the melting phenomenon occuring when a mixture of iron oxide and aluminum is ignited.

High-speed Cineradiography

Development of super-speed X-ray motion pictures opening fascinating new visual worlds to science.

By HAROLD M. GROOMS

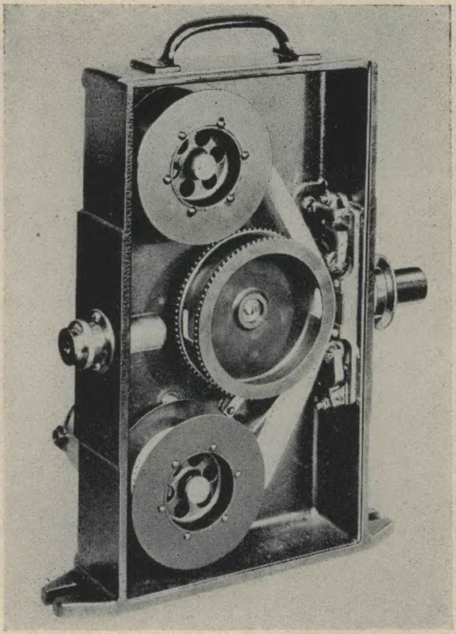

FIG. 3—This is the high-speed shutterless camera used to photograph the ultra-rapid X-ray analysis described above. Camera takes 100 ft. rolls of 35mm. film. Focusing is done directly through film or ground glass in the film gate by sighting through apertures in the large central driving sprocket.

A NEW PROCEDURE that brings to X-ray analysis the same advantages that slow-motion movies bring to sports events is the result of recently perfected super-speed X-ray motion pictures. Developed in the Westinghouse Lamp Research Laboratories in Bloomfield, New Jersey, super-speed X-ray movies team up X-ray exposures of 10 millionths of a second and a shutterless camera shooting movies at 100 frames a second.

Dr. Charles M. Slack, director of research for Westinghouse's lamp division, said, "This X-ray 'eye' can analyze the internal structure of rapidly moving objects and human organs. With exposures of such rapidity—200 times faster than a person blinks—we are able for the first time to make X-ray movies of speeding objects without blur."

The X-ray exposures, repeated at one-hundredth of a second intervals, are recorded on a continuously moving strip of 35mm. movie film. To illustrate the new technique, Dr. Slack recently showed a group of physicists the "shortest short ever photographed," a 15-second X-ray movie sequence made by members of his staff. Their subject was a violent chemical reaction which took place in a crucible the size of a demi-tasse cup. The reaction pictured actually took one second, but the high speed camera and use of ultra-rapid X-ray exposures enabled the action to be so photographed it could be slowed down when presented on the screen. With this technique, Dr. Slack pointed out, rapid action, which would be impossible to analyze at its normal speed, can appear on the screen in comfortably-observed slow motion just as in an ordinary movie.

The reaction shown occured when a mixture of iron oxide and aluminum, ingredients of wartime incendiaries, was ignited. The X-rays, penetrating metal crucible walls lined with refractory material, revealed the actual melting phenomenon inside the crucible as well as the subsequent bursting of the molten metal through a steel plate underneath. A regular movie of the reaction photographed in visible light, by contrast, showed merely a shower of sparks and molten metal gushing out the bottom of the crucible.

Although the test movie shown was made at 100 frames a second, Dr. Slack said that 150 frames a second have been attained and possibilities of a much higher rate—perhaps up to 2,000 frames a second—are being investigated. X-rays have been recorded on movie film previously but the movie subjects were confined to relatively slow action because the

(Continued on Page 178)

Television Film Center

Picked crew, permanent sets and fixed basic lighting effect marked economies in Hal Roach TV film making.

By JOHN FORBES

CLIFF STINE, A.S.C., (white shirt, center, back to camera) lines up action on "Don't Be A Sucker," one of three series of TV films being produced by Hal Roach, Jr. at Hal Roach studio in Culver City, which is now west coast center of video film production.

WHILE SOME television circles may deny Hollywood's claim that it's now the television center of the world, there can be no disputing that the Hal Roach Studio in nearby Culver City has become the center of television film production. This famous studio, which once turned out most of the industry's film comedies, has converted its entire facilities to production of television films. Independent TV film producers, who now lease space there, claim video films can be produced more economically on the Roach lot because of the efficiency that follows use of standard motion picture lighting, equipment and procedures.

One of the studio's most active producers of TV films is Hal Roach, Jr., son of the studio's founder and head of Roach & Beaudette Enterprises. Roach currently is producing three series of television films. Through extensive pre-production planning on the series, Roach has developed procedures tending greatly to reduce the cost of making films for television—a requisite in these pioneering days.

First of all, Roach has organized a picked production crew comprising of cameraman and assistants, the director, gaffer and grip. The crew works together as a closely coordinated team on every Roach & Beaudette video film production. For his cameraman, Roach picked Clifford Stine, A.S.C., who has been a special effects cinematographer at RKO since 1930, was the late Vern Walker's assistant, and who will resume his post at RKO when that studio commences production again.

Stine has photographed two of the initial productions in the three series of video films which comprise "Life With The Erwins," featuring Stu Erwin and June Collyer in a series of domestic comedies on the order of Blondie and Dagwood; "Don't Be A Sucker," documentary type dramatization of modern day rackets, made with cooperation of the Bunco Squad of the Los Angeles Police Department and the Los Angeles Better Business Bureau; and "Myrt and Marge," based on the popular radio series by the same name. Also planned is a fourth series, "Let's Dance," featuring Veloz and Yolanda. Films in this group will be educational as well as entertaining, and each will feature some famous comedian as the "pupil."

Roach Junior is using no amateur talent in his television films, giving all important roles to tried and tested screen favorites such as Franklyn Pangborn, Lyle Talbot, Stu Erwin, June Collyer and others.

Economy in TV entertainment film production demands wide use of process backgrounds, Roach believes, which is substantiated by his choice of Clifford Stine as his cameraman. Cline has brought to the Roach productions many of the shortcut procedures developed for feature films. Roach now maintains a series of standing sets on his sound stages, all with the basic lighting and scaffolding set. These never have to be moved or re-installed. The wall paper on the walls may have to be changed, or one flat may be switched with another to vary the appearance of the room or to alter position of a window, but basically the set lighting requirements remain unchanged, except for any special floor lights that might be needed. Not invariably the script is altered slightly to permit use of these standing sets. For the "Erwin Family" pictures, one group of sets remains intact so it can be used for subsequent pictures in the series.

Hal Roach, Jr., is presently considering

(Continued on Page 181)

TOMORROW'S TELEVISION

Here, summarized, are highlights of discussions on television held at recent S.M.P.E. convention in N. Y.

By J. M. BRADY

THEATRE television equipment was demonstrated at the S.M.P.E. convention that affords images up to 15 by 20 feet. Picture shown in photo was projected from the television projector mounted mid-room on tubular steel supports, and was picked up by a regular TV camera from a live scene in an adjoining room.

MOTION PICTURE films are destined to play an increasingly important role in television programming, seven speakers at the Society of Motion Picture Engineers semiannual convention last month agreed. Opening the Society's week-long technical sessions at Hotel Statler in New York, a forum on television motion pictures presented the views of authorities in several fields and was followed by a general discussion by both audience and speakers.

It was stressed that present knowledge is sufficient to overcome many of the problems now existing, both in picture and sound quality. C. R. Keith of the Western Electric Company demonstrated "horrible examples" in 16mm. recording, together with examples of good 16mm. technique. With 16mm. now in wide use in television operations, he pointed out that excessive flutter and high noise level, as well as other types of distortion can be improved to the standard now existing in 35mm. operation. Most prominent among the sources of trouble are processing and projection, Mr. Keith added. Development of 16mm. film, he said, is inferior to present standards in 35mm., while present 16mm. printers often introduce distortion and flutter in prints. Most 16mm. projectors, he continued, do not provide the optimum results possible from the film.

Pointing out that improvement is possible in both the production of films for television and kinescope recording, Dr. Alfred N. Goldsmith, a consulting engineer of New York City, said that continuing research is necessary in both 35mm. and 16mm. fields to secure the best possible results from film in television.

The lighting of films for television came in for lengthy discussion, and Richard Blount, of General Electric Company, described the types of distortion which enter into television reception by the improper use of lighting techniques. The subject was further explored in a paper read by A. H. Brolly, which pointed out that "many principles of lighting for motion picture photography and the stage also apply to television but important differences make separate consideration of techniques imperative. Required light intensity is determined by the sensitivity of the image orthicon, the amount of amplification used, and the lens aperture. Color requirements in television may be met by the use of present knowledge.

"Unbalanced color response results from faulty understanding of the use of Kelvin temperatures and filters. The proper means of illumination for television are incandescent and fluorescent lights, each of which has its own particular uses and limitations.

"The fixtures used for these lights must be adapted to the special purposes of television. About twenty units of lighting are normally required for a small studio and about fifty for a large studio. These fixtures must be both quiet and simple in operation. The possibility of oscillation in fluorescent lamps may be minimized by their intelligent choice and installation. Present knowledge and means will suffice for solving the major problems of television studio lighting."

Mr. Brolly also described the use of a combination of fluo-

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SIMULTANEOUSLY, in Los Angeles, Pieter van den Berg (left), president of North American Philips, Co., Inc., demonstrated company's new equipment which affords projected television on either 12 by 16 inch or 36 by 48 inch screens. Dr. E. B. Doll, company engineer, holds cathode-ray tube which is integral part of equipment.

NOW
Is The Time
To Start
Thinking
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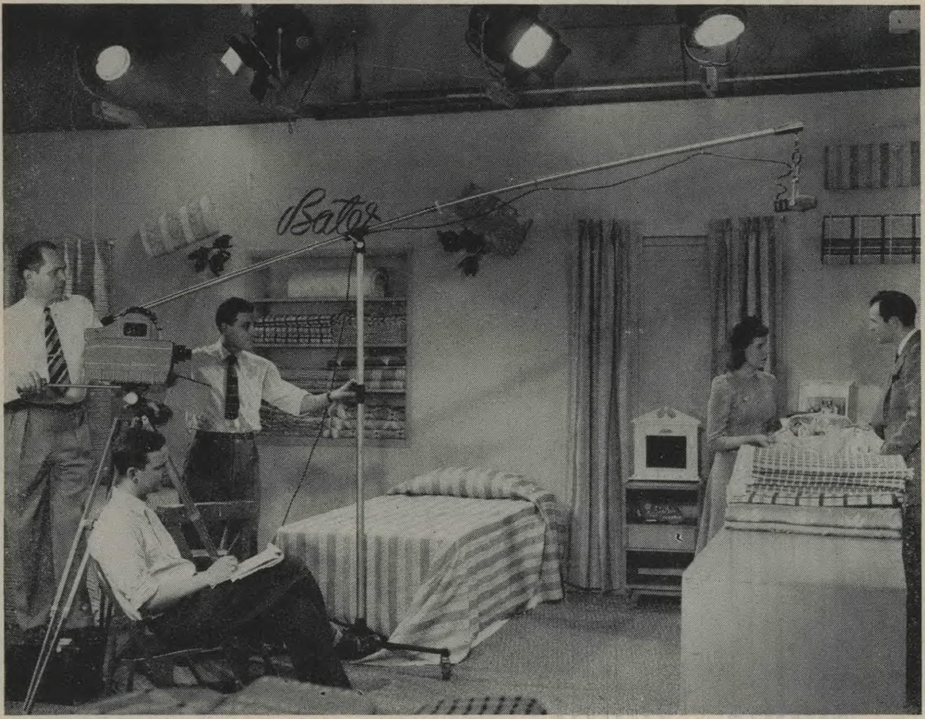
For 1949—

FOR
OUTSTANDING
PHOTOGRAPHY—

EASTMAN
NEGATIVE FILMS
For All Pictures

J. E. BRULATOUR, INC.
Distributors

16mm. and 8mm. Cinematography
SECTION



IN PLANNING the photographic approach to a commercial film subject, the cameraman has a two-fold responsibility: he must suit his style to the subject, and he must at the same time make sure that he is presenting the client's message, product or service in the most forceful pictorial manner.

Photographing The 16mm. Commercial Film

The photographic planning of a commercial film should begin when the picture idea is in the earliest stages of scripting.

By CHARLES LORING

THE IMPORTANCE of good photography in the production of 16mm. commerical films cannot be over-rated, for there is no other type of motion picture which depends so strongly upon visual treatment for its total effect. This is not to imply that other phases of production such as writing, direction and editing are unimportant, or even less important—but since the commerical film always has an ax to grind, in a manner of speaking, the visual package in which it is presented can do much to win and hold audience attention.

Time was, and not too long ago, when the commercial film was considered the illegitimate and somewhat ragged little brother of the entertainment film. It was a kind of unnecessary evil which certain misguided organizations used to promote ill-will between themselves and their customers or employees. Times have changed, of course—and now the well-produced commercial film is considered the most potent medium available for presenting an idea to an audience.

With this coming-of-age there has risen a new responsibility. No longer can the commercial film afford to use shabby technique in telling its screen story. The great American audience has become accustomed to the very best photography in the photoplays that come from Hollywood, and they have come to expect a similar quality of technical finish in any picture which is presented for their approval. For this reason, if for no other, it behooves the commerical producer to use the most original and professional type of photography to present his client's ideas on the screen.

The photography of a commercial picture does, however, present a certain challenge. The subject matter of the average commercial film is, by its very nature, usually less interesting than that of a film that is conceived solely to entertain an audience. Sometimes the subject is downright dull—and in such cases the director of photography must use every trick in and out of the book to make the subject at least visually palatable.

The planning of the photography for a commerical subject should begin when the idea is in the earliest stages of scripting. The cinematographer should be present at all story conferences and should be given free rein to suggest photographic treatment of the idea. The experienced cinematographer will know what is practical and effective from the visual standpoint. Invariably he can suggest less-involved ways of staging a situation which will be more effective pictorially than those which the director or the writer may have in mind. If he is available during the early phases of script development, he certainly can prevent an over-enthusiastic writer creating situations which would be impractical to photograph within the budget allowed.

In planning the photographic approach to a commercial subject, the director of photography has a twofold responsibility: he must suit his style to the subject and

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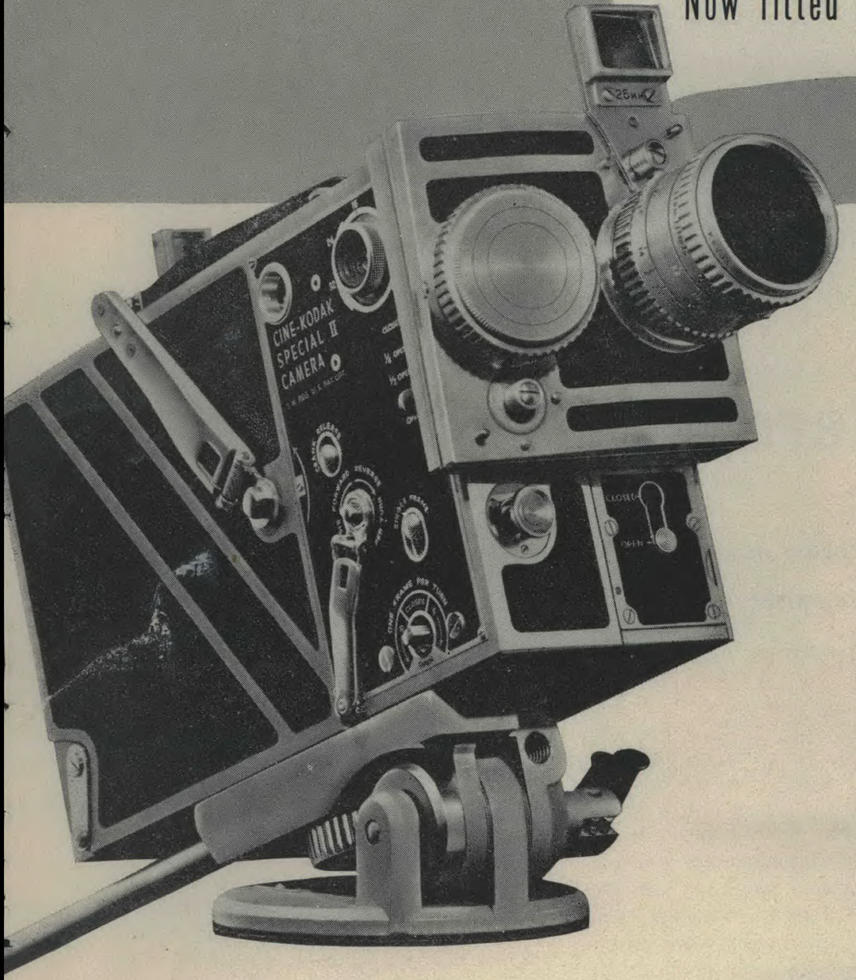
Again available! *Cine-Kodak Special II Camera*

Now fitted with superb new Kodak Cine Ektar *f*/1.4 Lens



Professional movie effects with amateur ease

This is the one 16mm. movie camera with which you can create most of the unusual screen effects ordinarily produced by special and expensive laboratory treatment. The controls are built into the camera itself!

Fades, dissolves, mask effects, double and multiple exposures, montages, animation, slow motion, and speeded motion—all can be achieved from the camera position. The reflex finder permits precise focusing and framing, requires no rack-over, eliminates parallax, does away with the need for titlers, allows really big close-ups. The wind-back shaft rules out the need for backing up film in a darkroom. The single-frame shaft even permits time exposures for dark scenes ordinarily beyond the reach of the fastest lens.

Imagination—only—limits its range

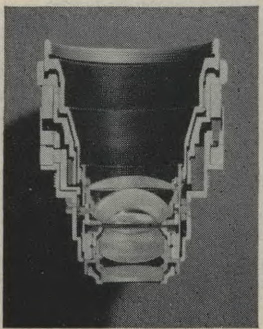
Name your effect. With the "Special II," you can have it!

Animated titles . . . maps . . . diagrams . . . "self-assembling" machines. Tremendously speeded action or time-lapse studies. All are easy with the "Special II."

Comedy situations, wherein big men vanish behind small trees . . . shiny new cars are transformed into battered flivvers . . . a screen character greets himself in mid-screen, is "beside himself" when and where you desire. The old and the new, the rich and the poor, the fast and the slow—all can be on the screen at the same time when the movie is made with the "Special II."

Title exposures against moving backgrounds . . . ghost effects wherein the background shows through the subject . . . fades against an unchanged background. These effects, and scores more—all under perfect finger-tip control—are simplicity itself with this camera.

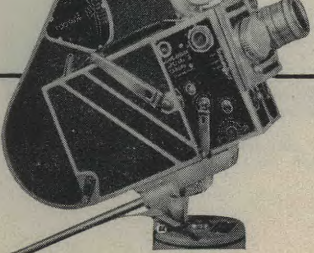
Small wonder Cine-Kodak Special II Camera is the first, and last, choice of the serious worker . . . the advanced amateur. Good news that production is once again in step with demand. Your Kodak dealer will be glad to accept your order for a Cine-Kodak Special II Camera—now!



Finest lens ever made for 16mm. motion picture cameras. The Kodak Cine Ektar 25-mm. f/1.4 Lens meets the highest standards of definition and edge-to-edge sharpness. Aided by the unique optical qualities of Kodak rare-element glasses, Lumenized glass-air surfaces, blackened lens rims, beveled flanges, and a new precision mounting of all elements, it provides superb image quality, excellent contrast and color purity, and unmatched flatness of field in addition to its extreme speed. And with the complete line of accessory Kodak Cine Ektar Lenses in a wide range of focal lengths also now available, still further scope and variety can be given to your film shows. Ask your dealer for the free Kodak booklet, *Kodak Cine Ektar Lenses,* which describes them in full detail.

Eastman Kodak Company

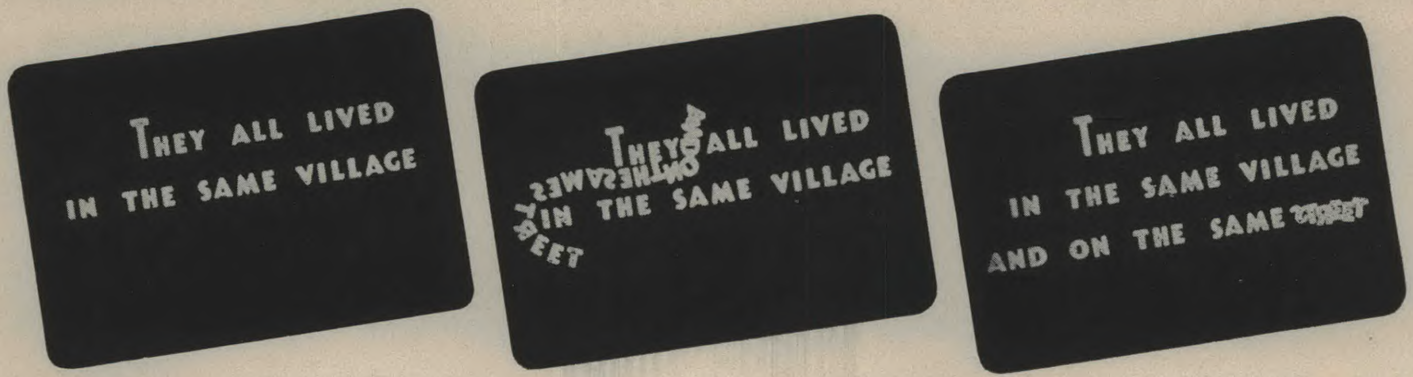
Rochester 4, N. Y.



The basic model of the Cine-Kodak Special II Camera is equipped with a 100-foot capacity film chamber and the 25mm. f/1.4 Kodak Cine Ektar Lens. It may be purchased with a 200-foot capacity film chamber and the same lens—shown at left—or with either chamber and a 25mm. f/1.9 Kodak Cine Ektar Lens. In one of these four forms, this fine camera will meet your every film-making requirement.

Kodak

"Kodak" is a trade-mark



IMAGINATION and ingenuity, coupled with a desire to enhance the interest of a novelty 16mm. film, resulted in this animated title which consists of movable block letters moving magically across the title card to spell out the text. Title is one in a series made by Dr. Rich Johnston, Ogden, Utah.

Animation Adds Interest To Movie Titles

Single frame exposure technique affords novel animation effects in movie titles, stepping up interest in footage lacking in continuity.

By LEIGH ALLEN

THE MOVIE amateur is frequently admonished to get continuity into his home movies—to shoot his scenes so that they link together to form a story. However, not all home movie subjects lend themselves to story continuity as we observe it in professional motion pictures. Take, for example, movies made of the kiddies and family around the home, or the scenes shot on a vacation trip. Despite the admitted need for continuity in such movies, it is seldom achieved and quite often impossible to attain from a photographic standpoint

Fortunately there are other means by which continuity can be woven into movies, and titles — *animated* titles — are the most promising. Besides, almost any movie amateur can make animated titles himself. By animated titles, we mean those in which the letters forming the text are made to move about magically on the screen, finally forming words and sentences. Such titles intercut between movie scenes perk up interest and at the same time tie the whole together continuity-fashion to form an entertaining movie. At first it might be argued that such titles would, by their very novelty, detract from the picture, but as the pictures with which we suggest such titles be used are usually shy on continuity—cannot convey a complete story by themselves—they need the advantage of clever titles to tie the scenes together and thus create additional interest.

For instance, Dr. Rich Johnston, an enterprising movie amateur of Ogden, Utah, employed animated titles to link together in story form a series of multiple exposures which he had conceived as a means of displaying the talents of his young daughter. Using a special masking device which he set up before his camera and which allowed him to expose 1/9th of the area of a single frame of 16mm. film at a time, this cinefilmer produced and entertaining home movie that showed nine little girls in nine windows of a house, all enacting a different role. His daughter played each role. Each time, the film in the camera was wound back to the original starting point, the next segment of the 9-section mask was opened, and the next scene to be played lined up within this area. On the screen the shades of the various windows are raised one by one to reveal each of the "ninetuplets"—to coin a word—enacting nine different roles. One was telephoning, another was studying her school lesson; still another was listening intently to a horror radio program, while in the adjoining window another little girl was playing nurse to her doll, and so on.

To enhance the novelty of this presentation, which, if presented without

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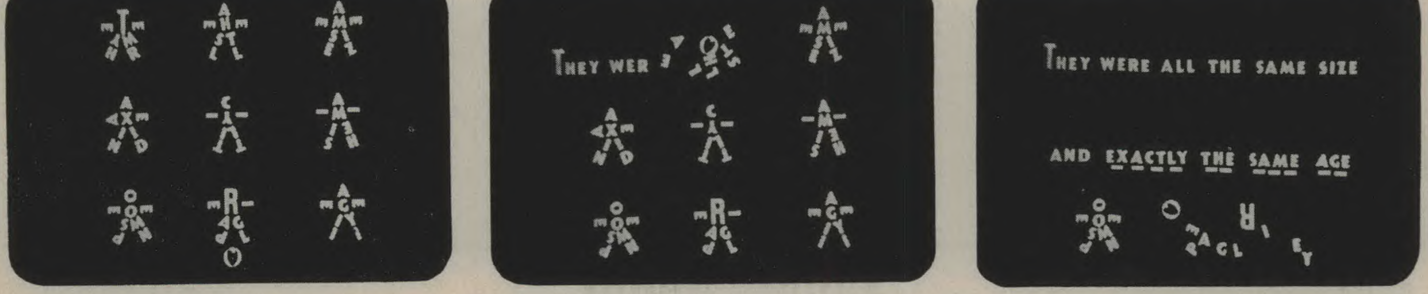


THE PICTURE, for which this title is one of many explanatory captions, described the doings of nine little girls. Appropriately, the various letters in the words of the title were grouped together to form nine little figures. These in turn unscrambled magically to form the title.

What makes water look wet in movies?

That's simple — it's Ansco Hypan Film.

And not only does this film make water look wet, but it makes people look real, makes grass look soft, makes thorns look prickly, makes sand look sandy.

In short, Ansco Hypan Film makes your movie scenes look completely, wonderfully natural. It gives them what a lot of people have come to call that "theater look" of the professionals.

For Ansco Hypan Film has a fine grain—a pleasing scale of tone values—a splendid panchromatic color balance.

Many claim that Ansco Hypan Film has moved their home movies into the way-above-average class. Let it do the same for you. **Ansco, Binghamton, N. Y.** A Division of General Aniline & Film Corporation. *"From Research to Reality"*.

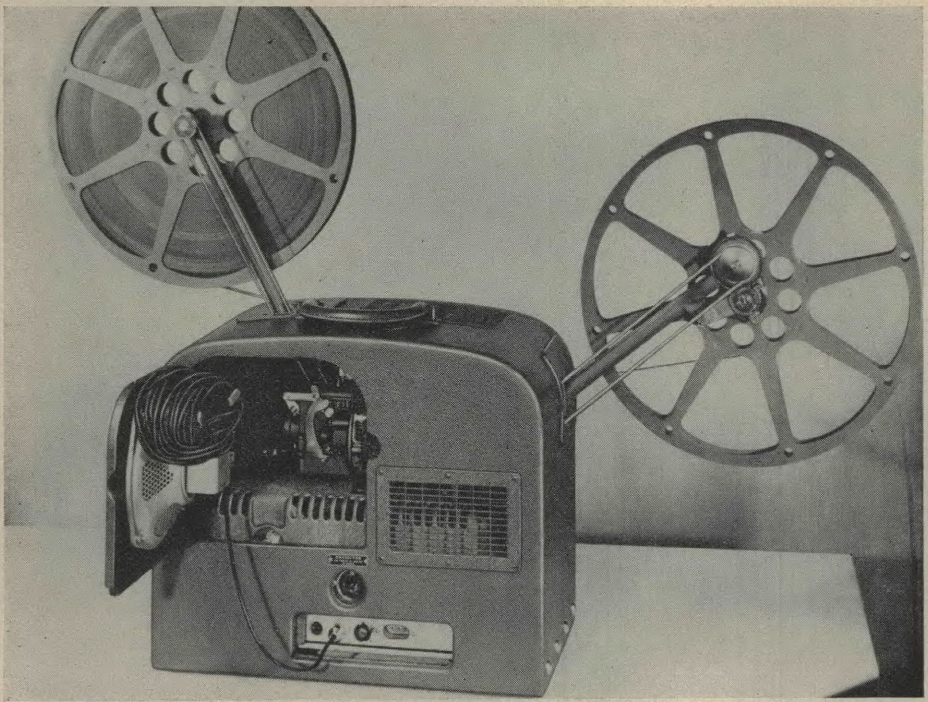
TIPS ON TITLES — If you're taking pictures of kids, try this for your title run. Line up the kids, back to camera, with title signs on their backs. Train your camera on each sign for a few seconds, then have the kids turn around in a group.

ASK FOR

Ansco

8 and 16mm

HYPAN FILM



ITS CONSTRUCTION and engineering proved in a gruelling endurance test, Bell & Howell's new "One-Case" Filmosound represents a series of improvements over older models—improvements of such magnitude that the older line is being dropped entirely.

Endurance Test

Bell & Howell puts its new lightweight "One-Case" Filmosound through continuous 24-hour-a-day comparative endurance run.

By J. G. ROARK

IT'S NOT often that a manufacturer is willing to submit a sample of his product to a series of exhaustive and completely honest comparative tests with similar sample products. Why not? Because of the ever-present possibility of embarrasing results which, once determined, seem always to leak out. However, when such tests are conducted and the superiority of a product is indicated, a certain amount of "flag waving" is certainly to be condoned. Such is the case with Bell & Howell Company.

The comparative tests conducted by Bell & Howell in their Chicago Plant featured a standard Filmosound taken directly from stock, and one each of six other sound projectors of prominent make. The other projectors were purchased from dealers to insure customer operating condition. No changes whatsoever were made in any of the projectors. They were just as the customer buys them.

The first results of these tests were published in advertisement form in the March issue of the American Cinematographer and also in other magazines. These results speak well for Filmosounds and their maker. According to Bell & Howell Company, these tests indicate that the new Filmosound gives less trouble, better performance, more economical performance, and most important, provides for better film safety than any of the other machines which competed in the test. Also, the Filmosound suffered no break-downs or any other occasions for repair necessitating return to the factory or, as would be the case with a consumer, a return to a Service Station. Film protection, picture steadiness, and trouble-free performance—all factors of major importance to the customer—are points in which the Filmosound was shown to excel, according to Bell & Howell engineers.

The new Filmosound represents a series of improvements over older models—improvements of such magnitude that the older line is being dropped completely in favor of the new.

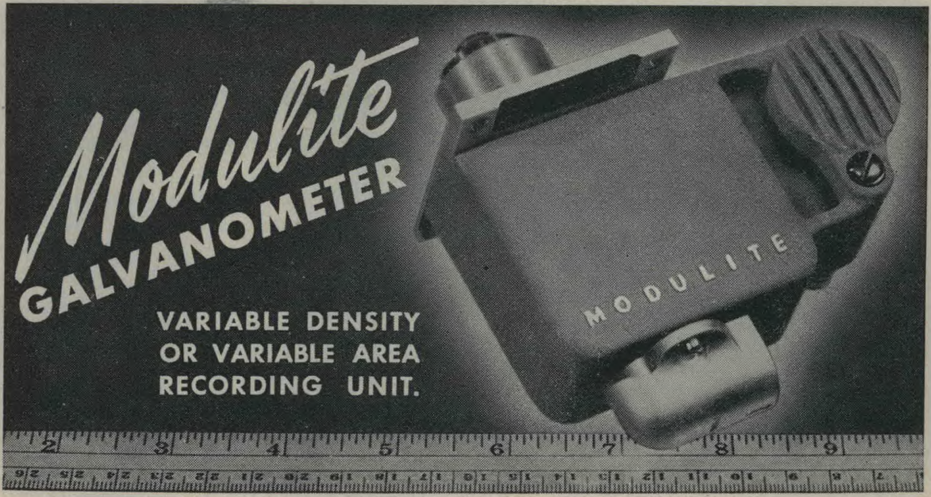
Smaller in all dimensions, lighter, and more compact, with no sacrifice of quality or performance, the new One-Case Filmosound is a portable sound projector that is actually light enough for the average person to carry easily. The 6-inch speaker is mounted on a door in the side of the case. The door is hung on split hinges permitting the speaker to be used enclosed in the case, at right angles to the case (a locating bracket maintains the speaker in a 90-degree fiixed position,) or removed from the case and placed near the screen. When the speaker is placed near the screen (a 40-foot cable is provided for this purpose), the posts on which the speaker cord is wound act as supports to hold the speaker upright.

No part of the film's picture surface is touched at any time by a part of the projector. Safe-lock sprockets assure correct threading. At both sound and silent speeds, the Filmosound is governor controlled. Metered lubrication assures adequate oil for moving parts at all times. Side tension springs in the film gate eliminate side sway in the film . . . constant tension take-up and film protecting snubbers guard against breakage. An automatic safety shutter and forced air cooling eliminate danger to film from excessive heat.

In appearance, the smoother lines and rounded corners of the new die-cast aluminum soundhead are a considerable improvement. Most important, however, is the saving in weight, 4¼ pounds, and less radiation of noise. Ample ventilation is provided by louvres on the rounded upper edges of the soundhead. The exciter lamp assembly has been redesigned for improved performance and accessibility. The exciter lamp cover is removed easily by loosening only one hand-screw. The lamp itself is equipped with an automotive prefocused base, which means simply that the exciter lamp will now have the same pre-aligned precision for which the Bell & Howell optical system has so long been famous. A new type damping shield is used to reduce microphonics.

New aluminum "slip-in" reel arms, fitted with slots in one end, have been designed to make attachment to the case a quick, slip-in-place operation. Cross bars in the case prevent the belts from falling into the case when the reel arms are removed. The projector case has been completely restyled for functional beauty with rounded top, external hardware in a matched shade of brown, door hinges mounted on the inside, and a new quick-grip latch, satin-chrome finished, for the door. A new ventilation grill on the same side of the case as the speaker carries heat away from the operator. Incidentally, the door fastens securely in a wide open position to eliminate the banged-head routine when threading a tilted projector. The new amplifier allows substitution of any current B&H speaker when greater audience handling capacity is needed. This versatility provides a choice of four speakers for the One-Case Filmosound—the 6-inch speaker provided, the B&H 8-inch or 12-inch auxiliary speaker, or the 15-inch power speaker. A 1000-watt projection lamp is provided as standard equipment on all Filmosounds.

During the course of the past 42 years, Bell & Howell has developed a tremendous "know-how" in the associated sciences of Optics, Electronics, and Mechanics. From this extensive experience has come the confidence in product that enables B&H to offer their lifetime guarantee. The test marathon continues in full swing. Already the Filmosound has passed the 1200-hour mark without requiring a single factory repair. For the prospective buyer, this means that with a Filmosound, he may reasonably expect good, trouble-free performance without the annoyance of losing usable time while waiting for his projector to be repaired. THE END



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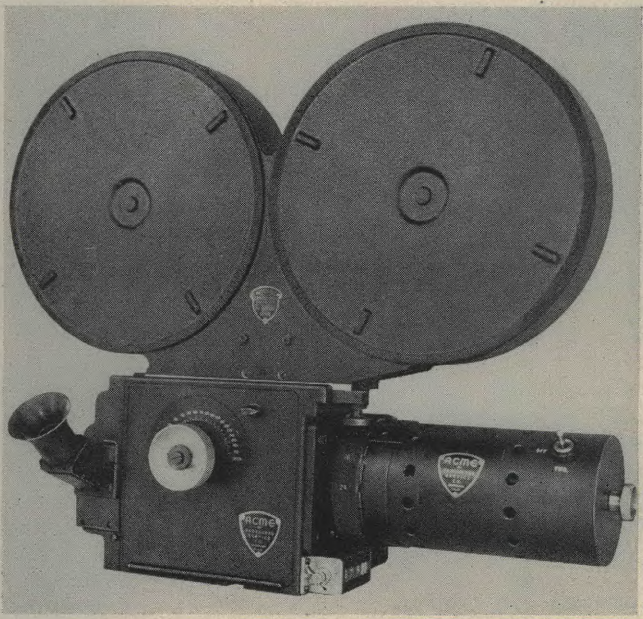

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Cine Kinks
for Movie Amateurs

IF YOU USE YOUR PROJECTOR to edit your pictures, employ a red grease pencil to mark your film for cuts as it is being projected. Red shows up clearly on either black and white or color film and may be quickly removed from film with lighter fluid or carbon-tetrachloride.

•

TO PREVENT OXIDATION of bright trim on your camera and lenses, after a day of shooting at the beach, wipe trim with small swab dipped in lighter fluid and polish with a clean soft cloth.

•

CUEING WIRE RECORDED SOUND with your home movie films will be made easier if you place a cue mark on the celluloid leader of the recorded spool of wire to correspond with start mark on your film.

•

REFLECTORS are unnecessary if you use the new reflectorfloods and reflectorspots now manufactured by General Electric Company. These photoflood lamps have their own built-in reflectors and all you need in order to use them are appropriate clamp-on sockets.

•

AN EXCELLENT three-piece service kit for servicing your movie projector consists of (1) small piece of chamois, for cleaning film gate; (2) small rubber syringe—excellent for blowing particles of dust from projector gate and surface of lens, and (3) small pad of lens tissue. Keep all three in a small box in your projector case.

•

USE BITS OF QUARTER-INCH adhesive tape for patching film that breaks during projection. White tape is easy to see when rewinding film, enabling you to catch the break and splice it after the show is over. Keep several pieces, about ½″ in length, on the base of your projector ready for use.

•

GIVE YOUR CAMERA a coat of wax (furniture or shoe) before starting on an ocean cruise or a vacation at the beach. Polish well and wax will preserve finish against corosion and other atmospheric damage.

•

MOONLIGHT EFFECTS can be achieved with color film by using a blue filter over lens and reducing exposure ½ stop.

ANIMATION ADDS INTEREST TO TITLES

(Continued from Page 170)

titles, would have a much shorter period of interest on the screen, the filmer conceived the idea of adding animation to the titles that were to describe the picture, title of which was "Nine Little Sisters." Subsequent descriptive titles went on to relate how on a certain street there was a house in which lived nine little sisters, that they were all the same age, all the same size, etc.

Instead of flashing complete titles on the screen, only the first word or perhaps the first sentence of a title would appear. Then the rest of the words formed magically, as the various letters emerged from a scrambled pile of characters; or a complete line or sentence would appear, then parade around the title card, finally coming to rest properly arranged in its rightful place in the composition.

Two examples of this filmer's titles are illustrated. They were composed of small white block letters on a soft black background. Several of the descriptive titles began with the block letters arranged in nine separate groups, representing nine little figures, as seen in Fig. 2. One by one the figures would unscramble to form words, then complete sentences.

A variation of the technique is shown in Fig. 1. Here the letters forming part of a sentence, slightly scrambled, appear magically and parade in a serpentine line over the title board, finally coming to rest in correct order to form a line of the title.

The animation, of course, was accomplished by stop motion photography—that is, shooting one frame at a time. Most modern cine cameras provide for single frame photography, but for those cameras that do not, it is quite possible to make single frame exposures by allowing the camera motor to unwind almost completely and just barely tapping the starting button to cause a single revolution of the shutter. Some cameras give better results with the speed set at 8 frames per second. In most cases, it is necessary to stop down the lens from a half to one full stop to compensate for the slower movement of the shutter, and consequently additional exposure time. This is not necessary, however, where the camera provides for single frame exposures.

Naturally, making titles this way requires endless patience. Each letter must be moved perhaps 25 to fifty times to complete the full cycle of animation—which means making 25 to fifty single frame exposures as well. Imagination and ingenuity are required, too, as illustrated in the examples shown here. But it is all worth the while. First it gives movie amateurs a new field of movie making to explore and also, its an accomplishment that invariably wins the admiration of your friends when finally the completed picture is shown on your home movie screen.

While we have described the use of such titles as captions for a novelty reel, animated titles will give a lift to your vacation movies, movies of travels, home town newsreels, and documentaries of local scenes. But except, perhaps, for a main title, do not use animation in titles describing movies which already have continuity, which have been planned and shot from a carefully developed shooting script. To do so would seriously detract from the picture's pictorial and story interest. Nor are animated titles recommended for lengthy pictures. The novelty would soon wear off, become boring, and do more harm than good.

Any type of movable letters may be employed: plastic block letters, die-cut cardboard letters, felt letters, wooden block letters—all lend themselves easily to this form of animation. Try it soon and see for yourself.

DOCUMENTARY STYLE

(Continued from Page 161)

prune pits in the dolly tracks."

In filming the daylight exteriors on location, reflectors were used instead of booster lights for fill-in illumination. A 400-amp. generator was used to light the night exteriors and a 200-amp. generator supplied current for the interiors shot on the spot. One tenement hallway location was shot with a scant 70 amps. of illumination.

In one of the sequences shot within the tenement houses, a group of people is shown crowded into a hallway. Far in the background was a small bathroom. None of the conventional lighting units were small enough to light this set, so Gertzman used and ordinary 150 watt kitchen bulb as the sole source of illumination.

The night street scenes were shot using conventional floods up to the generator's limit of 400 amps., and lights were set up in store windows, etc., in order to produce a realistic atmosphere of activity.

"Working so far from our studio facilities, we had to make every light count," Gertsman explains. "When we had lighted our street scenes up to the 400-amp. limit, we had to stop lighting units and shoot with the current available.

It's amazing what results you can get when you know you have to make do with the equipment at hand. It's a challenge to the ingenuity to have to improvise in this way, but the result is often more natural and realistic."

There is no apparent lack of production value in "City Across the River," however. On the contrary, the photography has the professional finesse that is characteristic of the best Hollywood product, together with an unvarnished realism that exactly fits the mood of the story.

Gertsman, now engaged in shooting "Partners in Crime" at Universal-International notes a parallel between his experiences on the documentary assignment and future trends in professional cinematography. "Time was when if some little thing went wrong on location, or if the weather wasn't quite right, the whole company would sit around and wait until things returned to normal, meanwhile adding quite a chunk on to the budget. Nowadays, with economy very much a factor in the production of films, we can no longer afford to do this. The cameraman has to take whatever conditions exist and work around them, often in newsreel fashion. Sometimes, he can take what appears to be a technical disadvantage and turn it into a device favorable to the story. On my current assignment, for example, we were on location in San Francisco when it started to rain. Since the sequence was a highly dramatic one we proceeded to photograph it in the rain. As it turned out, the rain heightened the dramatic mood, and gave the scene real punch."

The cast and crew of "Partners in Crime" recently returned from a location jaunt to Nogales, Mexico, where lengthy outdoor sequences were shot. All of the night exteriors were photographed in daylight using infra-red film, and since this was Gertsman's first experience in the wide-scale use of this unusual film stock, he encountered many interesting problems.

First, it is a common axiom that infra-red film records graduations of black and white, not in terms of the color of the subject, but rather according to the amount of infra-red rays emitted by the subject. In making some preliminary tests to see how colors would record, Gertsman photographed a navy blue coat having accessories of the same identical color—at least to the eye. As seen by the infra-red film, the coat recorded dark gray, the belt black and the buttons white. Gertsman was further amazed to note how a single incandescent lamp will "burn through" even when bucking a blazing sun, thus making realistic night shots easily available.

As a director of photography, Maury Gertsman, A.S.C., is an able and versatile

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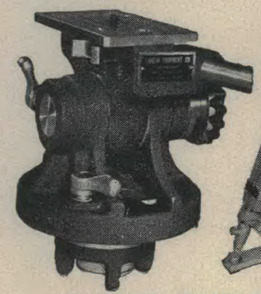

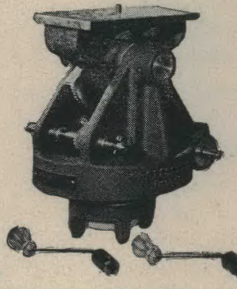

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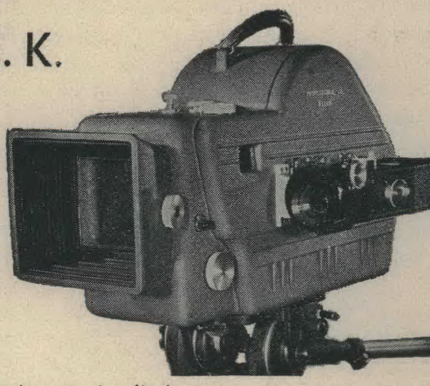

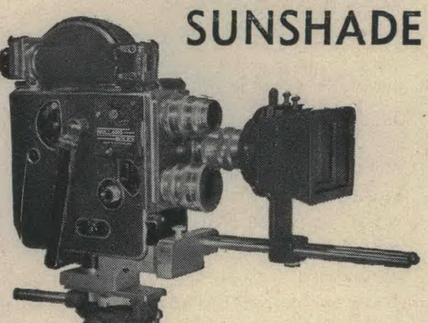

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• Arthur Edeson, having completed supervising the making of release prints of Douglas Fairbanks' "Thief Of Bagdad," began shooting Jack Pickford's latest production.

• Reggie Lyons wound up the camera work on J. Stuart Blackton's Vitagraph production, "Between Friends," based on the Robert Chambers story.

• John Dored was jailed in Russia for shooting burial of Lenin in Moscow. The complete story of his experience later appeared in the May, 1924 *American Cinematographer*.

• John Seitz returned from Europe where he had been filming "The Arab," for Rex Ingram

• Gaetano Gaudio was elected president of the A.S.C. Also elected were Gil Warrenton, Karl Brown and Homer Scott, vice-presidents; Charles J. Van Enger, treasurer; and Victor Milner, secretary.

• Louis Tolhurst, collaborating with Sol Lesser, was preparing to shoot a feature-length microscopic film study of insect life for theatrical release, but with the educational release possibilities also in mind. Tolhurst had become famous for his "Secrets Of Life" series, an earlier micro-movie series.

• Bert Glennon was being praised by critics for his outstanding cinematographic artistry on Cecil B. DeMille's production "Triumph" which he photographed following DeMille's successful "Ten Commandments."

• Victor Milner was again behind the camera for Fred Niblo, this time shooting "The Red Lily."

• H. Lyman Broening started shooting "Being Respectable" at Warner Brothers studios. Former cinematographer Phil Rosen directed the picture which featured Marie Prevost, Irene Rich, Louise Fazenda, Monte Blue, Ted Von Eltz and Sidney Bracy.

• Max DuPont returned from an extended stay in Tahiti, robust and raving about South Seas sunsets.

• Herford Tynes Cowling was in India shooting scenes for an untitled picture. In those pre-Constellation days, Cowling transported himself and photographic equipment via elephant in covering remote areas with his camera.

• Robert Newhard, who was being lauded for his camera work on "The Hunchback of Notre Dame," directed by Wallace Worsley, was now shooting for Nell Shipman productions.

craftsman who believes that a cameraman must be flexible enough to adapt his lighting and camera style to any type of assignment.

On this point it is interesting to note a comparison between two of Gertsman's recent pictures. "City Across the River" as we have pointed out, follows a documentary treatment, utilizing photography that is graphic and realistic in its simplicity. In direct contrast is "Rogue's Regiment," filmed months earlier, which is a story of intrigue in the Orient. This unusual action drama is ripe with visual mood. In it, Gertsman used shadow for emphasis instead of light. The lighting was mostly low-key, subdued and mellow, perfectly tuned to a plot that constantly shifted moods from the sinister to the romantic. Wide-angle shots framed with foreground objects were used throughout to give depth to the sets and planes of action. In short, every dramatic device of lighting and camera angle was used to make the mood of "Rogue's Regiment" faithful to its exotic plot and locale.

The casual observer viewing these two films would hardly suspect they were photographed by the same man, for they represent completely opposite extremes in photographic styles. Yet each treatment is directly keyed to the subject which it is called upon to present.

In setting forth his ideas on the role of the camera in production, Gertsman observes: "I feel that the story is the most important basic unit of the motion picture, and everything that happens on the set should be for the purpose of interpreting that story faithfully on the screen. Therefore, the camera should not call attention to itself as a device but should subordinate itself to the telling of the story. Camera movement, for example, is a powerful cinematic device but it should never be obtrusive."

TOMORROW'S TELEVISION

(Continued from Page 166)

rescent and incandescent lights with simple camera lens filters to abtain improved color response with image-orthicon television camera tubes. Because of the characteristics of camera tubes, he said, the color as well as the intensity and directivity of the light used is an important factor. A light that appears bright to the eye, he explained, may be less efficient in terms of transmittable signal than another of a dafferent color characteristic.

Mr. Brolly also dwelt on the subject of makeup for television live shows. "Purple lipstick and yellow rouge as makeup are no longer needed by television performers," he said, adding "that application of known principles of illumination can make possible natural effects without exaggerated or false makeup." He stated that, to this time, the proper use of lighting has not kept pace with the advance in other types of equipment used in television.

That theatre television is a step closer to realization was revealed in the introduction at the convention of commercial models of theatre television equipment, greatly reduced in size and providing greatly improved images up to 15x20 feet. Such units, it was stated, probably will be in general production by the end of 1949. RCA expects to be in a position to manufacture theatre television equipment based on the system demonstrated at the convention, in pilot-run quantities, possibly by December, 1949. It is expected that the price for a single unit without stand-by facilities will be less than $25,000.

Hollywood's film industry long has speculated on the effect theatre television will have on film production, whether it will greatly increase the making of motion pictures or whether feature film production will be sharply diminished by the advent of theatre video.

Theatre television programming appears to fall into two broad classes, one spokesman said. These are:

I. Use of regular television broadcast material.

II. So-called 'closed-circuit' performances in which a privately originated program is fed to one or more theatres.

"In the second case, some examples of originating sources might be:

I. Live action in a studio from the stage of a theatre or from some public place such as a sports arena or a site of a political event.

II. Motion picture film produced either in more or less regular fashion, or by Kinescope photography to 'store' some program such as those described.

In any case, program transmission might be by microwave relay, equalized telephone lines, coaxial cable, or some combination of these.

In the meantime, while the S.M.P.E. dwelt on various phases of television at its east coast convention, an important advancement in the reception of television programs was being unveiled in Los Angeles. There, before a select group of representatives of the press and of the radio manufacturing industry, Pieter van den Berg, president of North American Philips Co., Inc., demonstrated his company's latest product—three component parts which may be used by any television set manufacturer to provide projection television on a standard 3 by 4 foot home movie screen.

For the average home, he also demonstrated a console model receiver, utilizing the Philips components, which provide a 12 by 16 inch image on its built-in translucent screen. The results of this projected television are so far superior to that viewed from the end of the conventional tube of ordinary television receivers as to suggest that development of present-day TV sets is comparable to the crystal set stage of early day radio.

The adoption of the Philips projected image system to television receivers so greatly improves image quality that a lot of the difficulties presently being experienced in an effort to improve reception may easily lie within the receiver itself. For example, standing at a distance of 25 feet from the Philips receiver, the 12 by 16 inch image viewed was sharp and possessed almost 3-dimensional quality. Moreover, the usual distortion that accompanies reception from direct-tube viewing was absent.

It is the opinion of many who witnessed the Philips demonstrations that should major set manufacturers adopt the Philips equipment for their receivers, average reception quality would be so greatly improved as to give marked impetus to increased use of films for television program material.

It will be interesting, a year from now, to review the many forthright suggestions, discoveries and equipment improvements revealed, both in this demonstration and the S.M.P.E. convention, and to note the tremendous influence they had in furthering television as the nation's fastest growing industry.

CALIBRATION OF LENS MARKINGS

(Continued from Page 163)

More recently, this work has been extended by Dr. Washer in a study of the errors in the marking of 20 lenses having focal length between 0.5 and 47.5 inches. During the investigation, it was found that the effective f/ number of the ideal lens can be readily determined for each of the marked stop openings if the light meter readings for a series of standard diaphragms (placed between the meter and a light source) are compared graphically with the meter readings for the range of diaphragm openings of the lens (*Figure* 1). Two curves of about the same slope are obtained by plotting the scale deflections of the light meter against (1) the effective f/ numbers or t/ numbers corresponding to the standard diaphragms and (2) the marked f/ numbers of the lens. The first curve will be a straight line since the plotted f/ numbers of the standard diaphragms give an accurate indication of the amount of light transmitted. The second curve, on the other hand, will not in general be a straight line unless the marked f/ numbers are accurate in terms

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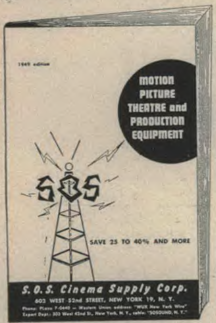
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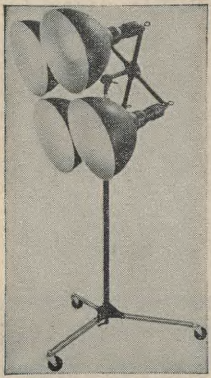

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of light transmission or are affected by a constant error. The t/ number corresponding to a marked f/ number is then obtained by locating the point on the first curve where the scale deflection is the same as that for the given f/ number. The value of the abscissa for this point is the corresponding t/ number. An approximate measure of the light losses within the lens my be obtained directly from the lateral displacement of the two curves.

The errors in marking the stop numbers of the lenses under study were also carefully investigated, with particular attention to those arising from errors in focal length and effective aperture, either separately or together. It was found that the magnitude of these errors was frequently as great as the difference between stop openings at the larger f/ numbers.

In connection with this phase of the investigation, a method was developed for presenting all calibration information on a single graph (*Figure* 2). As logarithmic coordinate paper is used, the intervals between successive stop openings are equal and can be taken as the unit on each scale. The marked values of the f/ numbers (indicated by circles on the graph) and the values of the calibrated f/ numbers, or t/ numbers (indicated by crosses), are plotted against the true geometric f/ number (the quotient of measured equivalent focal length and measured effective diameter of the stop opening). A straight line is drawn through the crosses, and a dotted diagonal line with unit slope is also drawn. If there are no errors in the marked f/ numbers—that is, if the indicated f/ number equals the true geometric f/ number—all the circles will fall on the dotted line. On the other hand, if the circles do not fall on the dotted line, the error in f/ number can be easily estimated from the curve as a fraction of the interval between stop openings.

All of the crosses would also fall on the dotted line if the transmittance were 100 percent. The displacement of a cross from the dotted line is thus a measure of the transmittance of the lens at that stop opening. If the crosses fall on a straight line parallel to the dotted line, the calibration is consistent and the measurement of the true geometric f/ number is correct.

---

[1] For further technical details, see Sources of error in and calibration of the f/ number of photographic lenses, by F. E. Washer, J. Research NBS *41,* 301 (1948) RP1927.

[2] Compensation of the aperture ratio markings of a photographic lens for absorption, reflection, and vignetting losses, by I. C. Gardner, J. Research NBS *38,* 643 (1947) RP1803.

[3] Calibration system for photographic lenses, NBS Technical News Bulletin *31,* 137 (1947).

HIGH SPEED CINERADIOGRAPHY

(Continued from Page 164)

exposures used were 1,000 times longer in duration.

While this is the first step in the new development—known technically as high-speed cineradiography—the scientist believes that a number of uses for it in medicine, industry and rocket research can be envisioned.

He suggested, for example, that with modifications of the procedure physicians can capture on movie film visible evidence of the fastest-moving organs within human bodies; orthopedists, chiropodists, and shoe manufacturers can get a moving pictorial record of feet in a running or walking action and, through simulated conditions in ground laboratories, physicians can study the bodily distortions fliers endure when they are catapulted out of speeding planes or when they make crash landings.

In industry, the new technique may solve at least many of the mysteries of how metal is deposited from an arc welding rod, and of how molten metal flows into a casting mold. X-rays, Dr. Slack explained, are unaffected by the strong light and fumes which obscure the conventional motion pictures made in visible light.

In the field of feature film production, X-ray movies could supply interesting moments in documentary films on a wide number of subjects.

As more powerful X-ray tubes are developed it may even be possible to inspect externally the internal action of airplane and automobile engines, which should result in smoother and safer engine performances.

For the national defense, the technique will be used in analyzing the burning action of fuel in a rocket. The Bureau of Ordnance, U. S. Navy, sponsored the project for this purpose.

Super-speed X-ray movies emerged from the same Westinghouse laboratory where Dr. Slack and his colleagues developed an X-ray tube, making possible millionth-of-a-second X-ray still pictures, eight years ago. Equipment containing that tube was used in the atomic bomb development and for studies in ballistics during World War II.

The motion picture referred to earlier was made by the so-called indirect method, one of two procedures possible with the new development. A flourescent screen was placed behind the crucible. Then a shutterless, oscillograph-type movie camera photographed the powerful, instantaneous images produced on the screen by the X-ray equipment. Instead of the closing and opening of a slow-motion movie camera shutter 100 times a second, the individual exposures were controlled by the short-time flash of the X-ray tube, making a shutter unnecessary. Film used was Eastman recording orthochromatic negative which was subsequently copied on Eastman Super-X 16mm. film.

The exposures, Dr. Slack explained, followed in rapid-fire order after one-hundredth of a second pauses to recharge the equipment powering the X-ray unit. The electronic tube used to make the exposures at such super speeds handles power pulses exceeding five million watts, 1,000 times greater than that handled by X-ray tubes in most physician's offices. A pulse transformer, similar to that used in radar sets, steps up a 20,000 volt condenser discharge unit to the 150,000 volts required to flash the tube and make the exposure.

The laboratory in which the X-ray movies were made is shown in the photographs. In Fig. 1, a technician is shown setting the stage preparatory to shooting the high-speed X-ray movies. The special camera is shown immediately

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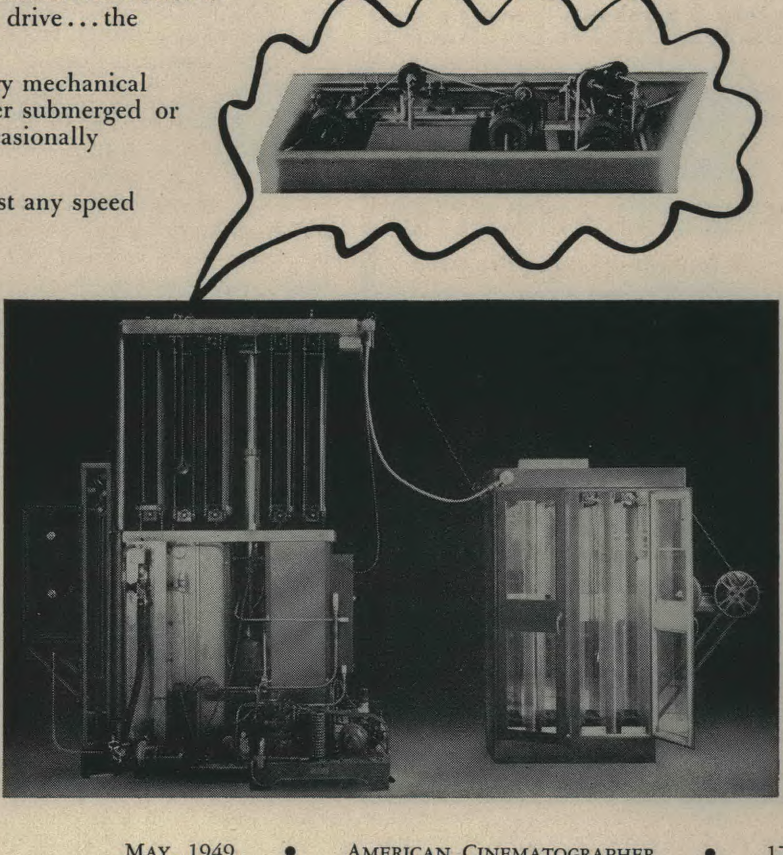

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above the technician's head, at the far end of the assembly. In Fig. 2, the chemical reaction has been set off while the shutterless camera records the action in X-ray at exposures of ten-millionths of a second.

The special high-speed camera, which is manufactured by General Radio Company, is shown in Fig. 3 with door removed to reveal its mechanism. The manner in which the camera is focused and the film is threaded is clearly indicated. The large central driving sprocket and the bottom takeup reel are each driven by separate motors. Focusing is accomplished by viewing the image through the focusing eye-piece when the two apertures in the driving sprocket are aligned as shown. The image forms on a small piece of translucent film inserted in the gate. Any 35mm. film or paper with standard perforations can be used in the camera. Capacity of reels is 100 feet.

PHOTOGRAPHING THE 16 MM. COMMERCIAL FILM

(Continued from Page 168)

must at the same time make sure that he is presenting the client's message in the most forceful manner. If, for example, he is about to shoot a picture for a social agency, he will plan a documentary style which will accentuate the reality of the situations in the script. But, on the other hand, if he is called upon to film a picture about fashions, perfumes or similar luxury goods, he will summon all the glossy tricks at his command in order to glamorize the subject.

Showing what the client has to offer in a manner that is compelling often presents a problem. Sometimes there is very little that lends itself well to photography. Frequently, as in a film on some mechanical process, the important technical action takes place within housings and sealed receptacles which can not be exposed for purposes of photography. In cases of this sort the cameraman is required to use all of his originality to get the story across. Mechanical animation on celluloid or animated models are often the only means of coping with such situations.

The cameraman should approach each new assignment with a fresh point of view and try to use some techniques that are a bit off the beaten path. Such originality will do much to freshen up an otherwise static subject and will help build visual interest in the idea that is presented. The one limitation is that these unusual techniques should fit the subject and should not be so startling that they detract from the subject.

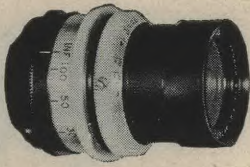
Until recently the photoplay and the commercial subject were thought of as two separate media with nothing in common. But now the trend is toward more dramatic handling of commercial subjects. This means that many photographic techniques of the photoplay can be applied to fine advantage in the commerical film. For this reason the commercial director of photography will do well to study the photographic handling of feature films and analyze them for effects that can be adapted to his own field of photography.

Lighting is perhaps the most important element in the photography of any picture which includes interior scenes, since lighting can build or destroy the atmosphere and mood of the film. Here, again, the key of lighting is dictated by the dramatic requirements of each sequence, plus fidelity to the source light that is indicated for that particular segment of action.

Lighting can do much to dramatize even a dull industrial subject. In black and white, dramatic side- or back-lighting can be used to good advantage. In Kodachrome, colored light strategically used can add actual beauty and pictorial force to static colorless machinery. Whether or not this treatment is permissible depends on whether the client wishes a flatly realistic representation of the subject (as is usually required in a scientific or training film), or a cinematically forceful impression of industry in action.

In photographing the commercial film the aim should be to keep the pace moving along at a good rate. This matter of pace is partially the responsibility of the director and the editor, but a great deal can be done by imaginative camera technique. *Pan, tilt* and *dolly* shots have movement of their own which, when properly applied, complement the action of the film and help to keep it "moving." Shots of this type should be motivated when possible, but in the commercial film it is often permissible to use them for no other reason than to force movement into an otherwise static subject. It is, of course, assumed that all moving camera shots will be executed smoothly and without calling attention to the technique itself.

Choice of lens and camera angle is especially important in the commercial film because the whole success of the picture may depend upon the manner in which the client's product or service is shown on the screen. The cinematographer cannot rely solely upon his artistic judgment in this regard, because the angle which he selects as being the most forceful from the composition standpoint may not be the one which shows details



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important to the client. The easiest way to solve this problem is to have a technical adviser from the client's staff on the set at all times to pass on each set-up as it is photographed.

The wide-angle lens is a boon to the commerical cinematographer for several reasons. First, it enables him to get adequate coverage on small sets or in situations in which he is unable to get back far enough from the subject to get a real long shot. Also, by allowing him to work closer to his subject and still get adequate coverage, it makes possible the closer placement of lights with a consequent reduction in the amount of light required. Highly dramatic composition of otherwise static industrial subjects may also be achieved with the wide angle lens.

The closeup really comes into its own in the commerical motion picture, because invariably there is a great deal of detail which can only be shown to best advantage when the camera moves in very close. Rarely can there be too many closeups in a well-made commercial film, provided that the cameraman re-establishes his subject adequately from time to time. Moreover, from the cinematic standpoint, closeups are pictorially forceful and add much to the impact of the film.

At first glance, the script for a commercial film may not seem to offer much for the imaginative cameraman to work with, but there is always some phase of any subject which can be built up pictorially and made visually forceful on the screen. There is a definite sort of beauty in industry: smokestacks puffing against the sky, the glow of blast furnaces, whirling machines, etc.—and all of these lend themselves to pictorial dramatization by the motion picture camera. The cinematographer should look closely at his subject, discard the idea that he is making a straight "nuts and bolts" picture, and concentrate on presenting the client's subject in the most forceful and visually attractive manner possible.

TELEVISION FILM CENTER

(Continued from Page 165)

a plan whereby all aspects of set lighting will be prepared in advance of shooting. This will be done to save as much time as possible when camera and crew moves into a "cold" set. Obviously this will make for considerable time-saving and, of course, clip plenty dollars from production costs. In most cases, it is possible to shoot all the interiors on a given picture in a single day. "Invariably we shoot twice as many setups in a day for television films as is general practice in motion picture production," said Stine.

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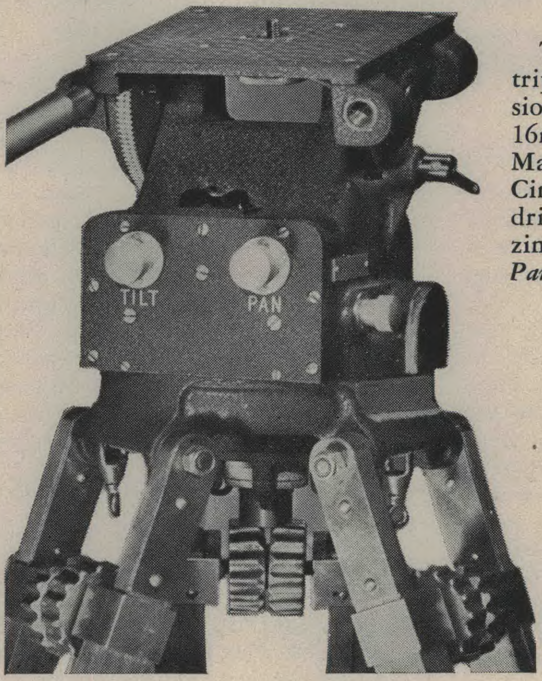

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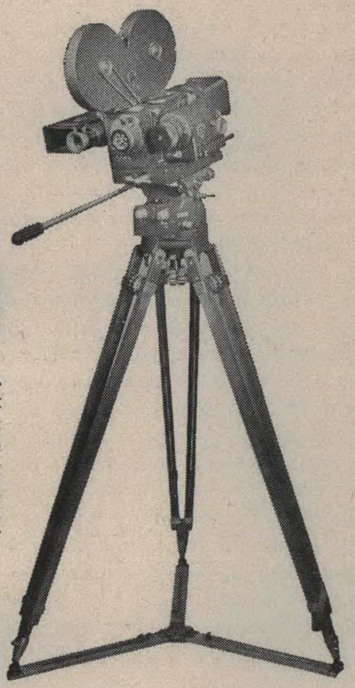

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uced on the Roach lot, requires close planning, quick decisions and no lost motion," Stine said, adding "There is no time for the tempermental. We have developed fine teamwork and this makes possible the low-cost production vital for television films."

Pre-production conferences between producer, cameraman, gaffer, grips and others connected with each production is common practice, and this, according to Stine, contributes to the smooth running of the team, once shooting on a picture starts.

The Roach & Beaudette organization naturally has made wide study of the importance of lighting to quality of TV films. Stine, of course, has been an important figure in these studies and was the first to point out the necessity for subduing the intensity of highlights and white areas in a television picture. Viewing the picture from the face of the television tube, the video viewer observes that the whites and highlights are often much too bright. This is because the viewer is not looking at a picture that is reflected from a screen but is seeing a picture under much the same conditions he would if viewing a movie on a translucent screen, where the highlights come through much stronger.

"Because of this," Stine points out, "it is important to tone down all white areas and highlights in films made for television so these areas will not 'burn through' in the televised picture."

Much has been said since the advent of films for television about following a "checkerboard" pattern in the overall composition of scenes; but Stine feels this can easily be overdone with consequent disasterous results. Scenes for television films must be kept as simple as posible, said Stine, and instead of retaining the balance of lighting normally used in feature film production, it is important to keep more definite separation between background and foreground objects—between the players and what lies behind them.

"Instead of following the 'checkboard' pattern," said Stine, "I believe it is better to avoid any form of sharp contrast in background patterns; to keep the walls in a moderate tone and to use light and shadows with discretion."

On the subject of makeup, Stine says recent studies show that most players in TV films should use darker makeup than they normally would for feature films. This results in better rendition on the TV receiver and avoids the washing out of features that has characterized so many early films made for television.

Hollywood's potential as the television center of the world can scarcely be discounted, in light of the wealth of technical talent available there, and especially with such men as Clifford Stine, members of the American Society of Cinematographers, and other technical groups pursuing exploratory studies in the field of television film production, and at the same time contributing the benefit of their findings to the television industry.

As to the future of the television film industry, Stine points to a recent development which may open up a tremendous field for television films. "One equipment manufacturer has just announced what it terms its 'basic buy' in packaged TV transmitters," Stine said. "This is a complete 500 watt television broadcast station made to operate with films and on coaxial cable network to start. Priced to sell in the neighborhood of $75,000, these packaged transmitters are certain to result soon in a marked increase in the number of television stations, especially in areas not served at present with video. And when one considers that films will make up the bulk of the program material for these stations it is easy to contemplate extent of the demands that eventually will be made on Hollywood for television films."

PRODUCTION METHODS COMPARED

(Continued from Page 163)

before anything else is done on a picture, to decide just what audience I'm aiming at, and then to keep my eye on that target from that moment on. But it is obviously uneconomic to shoot for a small audience, and a motion picture costing some hundreds of thousands of dollars, which has taken the efforts of one hundred or perhaps two hundred men, has no more business directing its appeal toward people with a special knowledge of film-making than exclusively towards, say, Seventh Day Adventists, or Atomic Research scientists, or Chicago meatpackers.

Now what of the actual techniques of picture making? I happen to have a liking, for instance, for a roving camera because I believe, as do so many other directors, that a moving picture should really move. And I have definite ideas about the use of cuts and fadeouts which, improperly handled, can remind the audience of the unreality of our medium and take them away from the plot. But those are personal prejudices of mine. I do not try to bend the plot to fit technique; I adapt technique to the plot. And that's the impotrant thing. A particular camera angle may give a cameraman—or even a director—a particular satisfying effect. The question is, dramatically, is it the best way of telling whatever part of the story it's trying to tell? If not, out it goes.

The motion picture is not an arena for a display of techniques. It is, rather, a method of telling a story in which techniques, beauty, the virtuosity of the camera, everything must be sacrificed or compromised when it gets in the way of the story itself.

An audience is never going to think to itself: "what magnificent work with the boom" or "that dolly is very nicely handled"; they are interested in what the characters on the screen are doing, and it's a director's job to keep the audience interested in that. Technique that calls itself to the audience's attention is poor technique. The mark of good technique is that it is unnoticed.

Even within a single picture, techniques should vary, even though the over-all method of handling the story, the style, must remain constant. It is, for instance, obvious that audience concentration is higher at the beginning of a picture than at the end. The act of sitting in one place must eventually induce a certain lassitude. In order that that lassitude should not be translated into boredom or impatience, it is often necessary to speed up things a little towards the end, particularly towards the end of a long picture.

This means more action and less talk, or, if talk is essential, speeches ought to be short, and a little louder and more forceful than they would be if the same scene were played earlier in the picture. Putting it bluntly, it's sometimes necessary to ham things up a bit. This rule was recognized very early in the picture business, and the old-timers used to say: "when in doubt, get louder and faster." They were putting it a bit crudely, but perhaps the rule still applies.

It takes a certain amount of tact, of course, to induce a good actor to over-act; and this is another argument in favor of shooting pictures more or less in sequence, because, once you have edged an actor into over-acting, it is, sadly enough, entirely impossible to edge him back again.

Direction, of course, is a matter of decisions. If it were possible to lay down a hard and fast rule that would cover all the decisions, all directors would be out of work. I shudder to think of *that,* but fortunately it's impossible.

The important thing is that the director makes his decisions when the need for them arises, and operates with as few rules as possible. The fewer rules you have, the fewer times you'll have to experience the unhappiness of breaking them.

Reprinted from *The Cine Technician* (London), courtesy of the publishers.

CURRENT ASSIGNMENTS

(Continued from Page 156)

M-G-M Contd.

- Marcel LePicard, "Forgotten Women," with Elyse Knox, Theodora Lynch, Allen Hale, Jr., and Veda Ann Borg. Wm. Beaudine, director.

- Harry Neumann, "Range Rogues," with Jimmy Wakeley, Cannonball Taylor, Gail Davis and Tom London. Oliver Drake, director.

Paramount

- George Barnes, "File On Thelma Jordan," (Hal Wallis Prodn.) with Barbara Stanwyck, Wendell Corey, Paul Kelly, Joan Tetzel and John Bromfield. Robert Siodmak, director.

- Leo Tover, "My Friend Irma," (Hal Wallis Prodn.) with Marie Wilson, John Lund, Dianna Lynn, Don DeFore, Dean Martin and Jerry Lewis. George Marshall, director.

- Ernest Laszlo, "Riding High," with Bing Crosby, Coleen Gray, Charles Bickford, Frances Gifford, William Demarest and Clarence Muse. Frank Capra, director.

- Charles Lang, "Copper Canyon," (Technicolor) with Ray Milland, Hedy LaMarr, MacDonald Carey, Mona Freeman and Harry Carey, Jr. John Farrow, director.

- John Seitz, "Sunset Boulevard," with William Holden, Gloria Swanson, Erich von Stroheim and Nancy Olson. Billy Wilder, director.

- John Alton, "Captain China," (Pine & Thomas) with John Payne, Gail Russell, Jeffrey Lynn, Edgar Bergen, Lon Chaney, Michael O'Shea and John Qualen. Lewis R. Foster, director.

R. K. O.

- Harry Wild, "The Big Steal," with Robert Mitchum, Jane Greer, William Bendix, Patric Knowles, Ramon Navarro and John Qualen. Don Siegel, director.

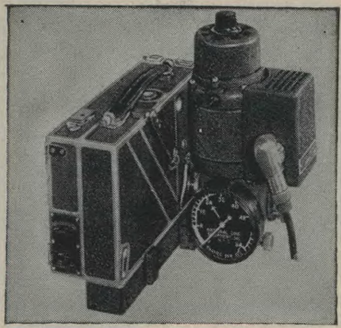
- Joe Valentine, "Love Is Big Business," with Claudette Colbert, Robert Young, George Brent and Max Baer. William D. Russell, director.

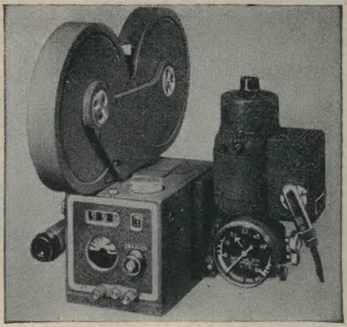
- Nick Musuraca, "Renegade of the Rancho," with Tim Holt, Richard Mann, Edward Norris and Movita. Lesley Selander, director.

- Nick Musuraca, "I Married A Communist," with Robert Ryan, Laraine Day, John Agar, Thomas Gomez and Janis Carter. Robert Stevenson, director.

Republic

- Lee Garmes, "A Strange Caravan," (Title since changed to "The Fighting Kentuckian") with John Wayne, Vera Ralston, Philip Dorn, Oliver Hardy, Marie





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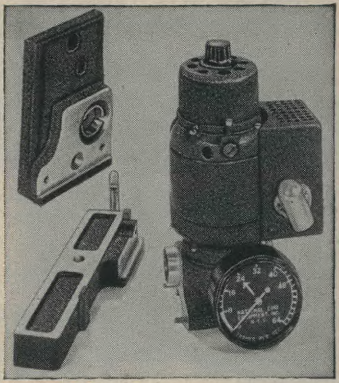

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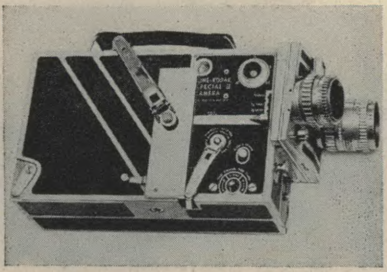

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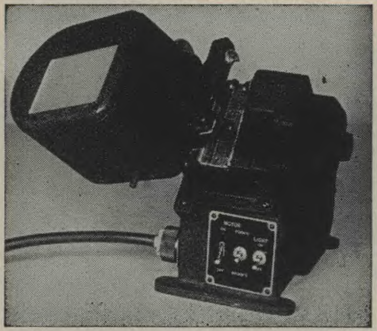

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- Joe MacDonald, "Pinky," with Jeanne Crain, William Lundigan, Ethel Waters and Basil Ruysdael. Elia Kazan, director.
- Harry Jackson, "Bandwagon," (Technicolor) with William Powell, Mark Stevens, Betsy Drake and Jean Hersholt. Irving Reis, director.
- Milton Krasner, "Three Came Home," with Claudette Colbert, Alan Marshall and Florence Desmond. Jean Negulesco, director.
- Leon Shamroy, "Twelve O'Clock High," (Shooting In Florida) with Gregory Peck, Millard Mitchell, Hugh Marlowe, Paul Stewart, Gary Merrill and Dean Jagger. Henry King, director.

United Artists

- Lionel Lindon, "Quicksand," (Rooney - Stiefel, Inc.) with Mickey Rooney, Jeanne Cagney, Barbara Bates, Peter Lorre, Patsy O'Connor.

Universal-International

- Irving Glassberg, "Sword In The Desert," (Technicolor) with Dana Andrews, Marta Toren, Stephen McNally, Hugh French, Jeff Chandler and Liam Redmond. George Sherman, director.
- Frank Planer, "Come Be My Love," (Neptune Films) with Robert Montgomery, Ann Blyth, Jane Cowl, Chas. McGraw. Robert Montgomery, director.
- Maury Gertsman, "Partners In Crime," with Howard Duff, Dan Duryea, Shelly Winters, Gar Moore and John McIntire. William Castle, director.

Warner Brothers

- Ted McCord, "The Octopus And Miss Smith," with Jane Wyman, Dennis Morgan, Allyn Joslyn, Eve Arden, Fred Clark, Ray Montgomery and Lina Romay. Michael Curtiz, director.
- Wilfred Cline, "Always Sweethearts," (Technicolor) with Shirley Temple, Barry Fitzgerald, Lon McCallister and Alan Hale. David Butler, director.
- Carl Guthrie, "Barricade," with Dan Clark, Raymond Massey and Robert Douglas. Peter Godfrey, director.
- Peverell Marley, "Return of the Frontiersman," (Technicolor) with Gordon MacRae, Rory Calhoun, Julie London and Fred Clark. Richard Bare, director.

WHAT'S NEW in equipment, accessories and service

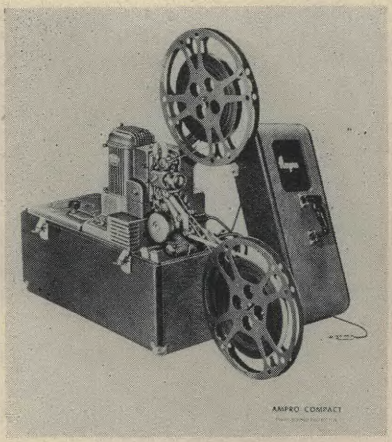
Synchronous Camera Motors

Producers Service Co., Burbank, Calif., announces a radically new synchronous motor for use with Bell & Howell, Mitchell and Acme motion picture cameras that provides a selection of fixed speeds at 24, 16, 12, 6, 3 and 1½ frames per second, simply by turning a convenient dial on motor case. A carefully engineered transmission of watch-like precision insures motor delivering full power at all speeds.

Ampro Portable

The Ampro Compact is name of new portable 16mm. sound projector announced by Ampro Corp., 2835 N. Western Ave., Chicago. Projector, sound unit and speaker are in one unit and may be quickly set up for use. Machine may be lifted to operating position from within its self-containing case, and the reel arms snapped in place. Speaker is mounted in lid of case and is placed beside projector when in use.

Features include silent and sound speeds; automatic rewind; uses up to 1000 watt lamp; 2000 ft. reels; and has rotating type sound drum. Removable front and rear covers facilitates servicing.



Ampro "Compact"

Projector Stand

A new portable projector stand for use in showing home movies is offered by the S & D Mfg. Co., 220 Fifth Ave., N. Y. When not in use, stand folds up to suit-

Collapsible Projector Stand

case size, holds reels of film and can be carried anywhere. Three collapsible tubular legs with rubber tips support a table top 15"x20". A friction control lock insures against any slipping while unit is in use.

Model A for silent and small sound projectors, offering storage for one empty reel and six 400-foot 8mm. reels or four 400-foot 16mm. reels, sells for $28.50. Model B, for heavy sound projectors, sells for $36.50.

Hallen Magnetic Recorder

Simultaneously with announcement of the company's reorganization, Hallen Corporation announces a new, improved model of the Hallen synchronous magnetic film recorder. New model boasts improved amplifier and motors of special design which insure absolute synchronous operation, according to Hal Powell. Company head. The Hallen recorder is meeting new trend for recording sound films magnetically instead of optically, providing instant playback of picture sound tracks. Also announced is appointment of The Camera Mart, New York City, as exclusive Hallen distributor.

Movie Titles

Title Craft, 1022 Argyle, Chicago, whose titles were formerly marketed through Bell & Howell Company, now offer 8mm. and 16mm. titles direct to consumer. A wide variety of background effects are available and fades and disolves may be had. A free folder is available showing samples and giving full details of service and prices.

Price Reduced

"General Motors and Henry Kaiser are dropping prices and I am doing the same," says Joseph Yolo, in announcing reduction in price of his automatic dissolve for Cine Special cameras from $60.00 to $54.00. Device permits making professional-like dissolves right in the camera.

SYNCHRONOUS MOTOR DRIVE
for the
E. K. Cine Special

110 Volt A. C., Single Phase, 60 Cycle

This motor will run in synchronization with either 16mm. or 35mm. sound recorders. It is provided with mounting platform which permits removal of magazine while camera remains mounted on motor.

Drive coupling attaches to single-frame shaft of camera and is mated to spring-steel drive arm of motor gear box. This assures that camera mechanism cannot be damaged if a film jam occurs as the spring steel arm drive will shear. This is easily replaced.

A knurled knob on motor armature permits rotating for threading. "On-Off" switch built into base. Platform base threaded for 1/4" and 3/8" camera tie-down screws. Rubber covered cable with plugs included.

Price $150 . . . Immediate Delivery

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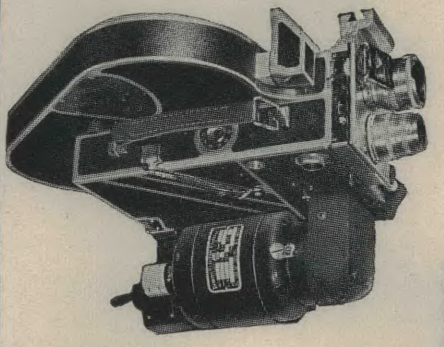

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Complete engineering and machine shop facilities for experimental work, model and production runs.

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Shows large, erect image, corrected from left to right, on ground glass.

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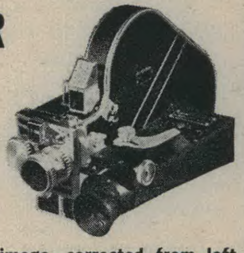

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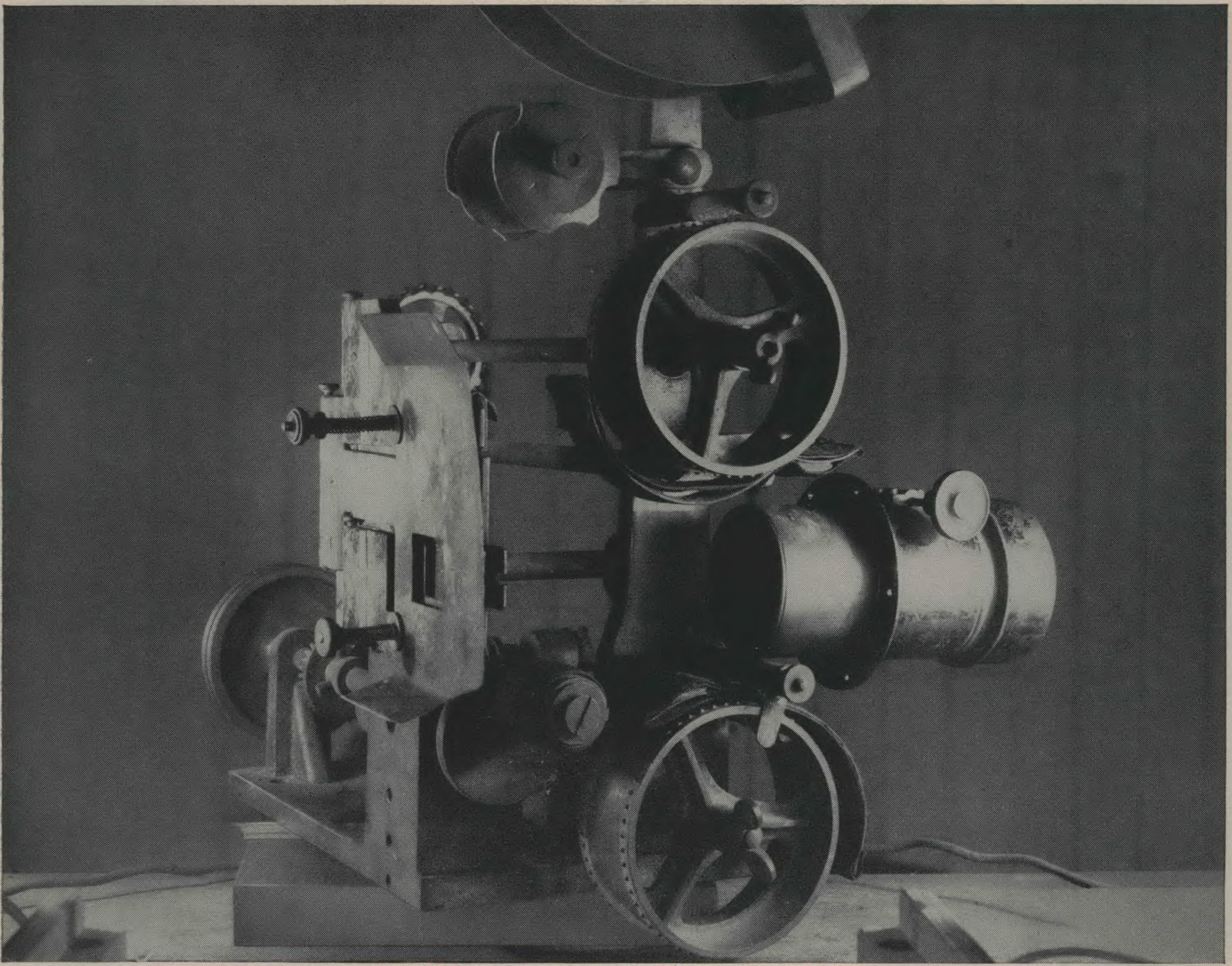
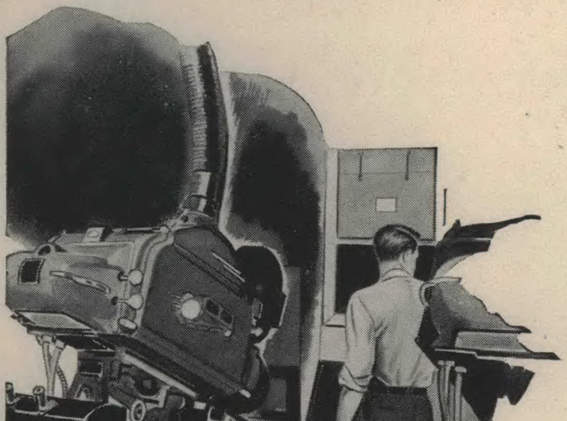


The Armat Vitascope which projected the first theater movie, April 23, 1896.



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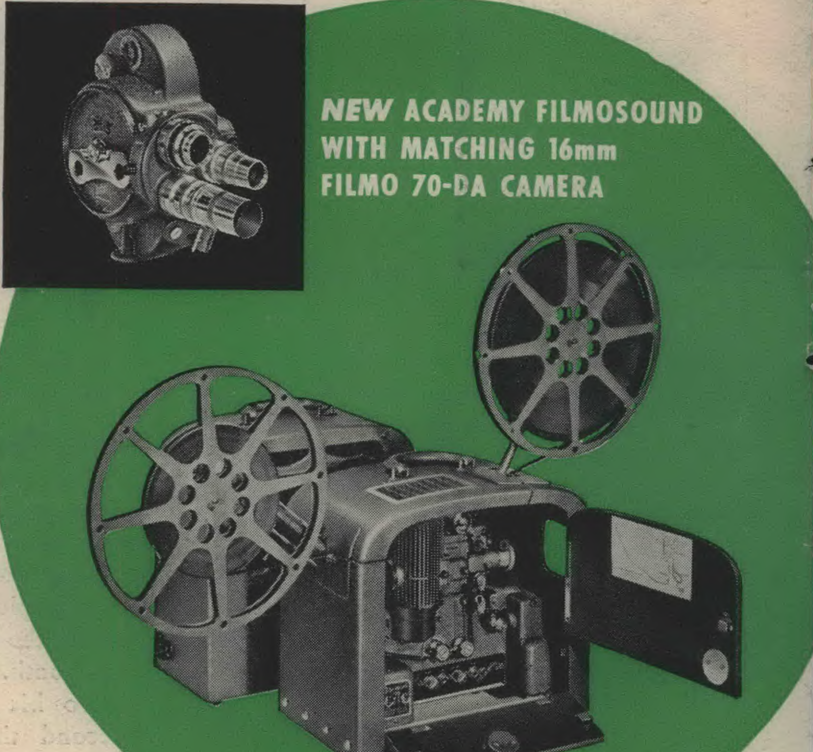

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